Xcelsius 2008 User Guide

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Contents

Chapter 1 Xcelsius 2008 Versions Available 17

Chapter 2 Application Overview 19

Chapter 3 What's New in Xcelsius 2008 23

Importing a Crystal Xcelsius 4.5 file into Xcelsius 2008....32

Chapter 4 Getting to Know Xcelsius 2008 35

Overview....36
Understanding the Xcelsius 2008 system....36
- How Xcelsius 2008 differs from traditional reporting applications....36
- How Xcelsius 2008 works....37
- How visualizations look....37
- Example 1: What-if presentation using alerts....37
- Example 2: What-if presentation using a calculator....38
- Example 3: Historical data comparison presentation....39

Understanding the Xcelsius 2008 tools....40
- Using the Components Browser....40
- Using the Canvas....43
- Using the Properties panel....46
- Using the Object Browser....48
- Using the Embedded Spreadsheet....52
- Using the Format menu....55
- Understanding fonts in Xcelsius 2008....57
- Using Themes....59

Using Color Schemes....59
Previewing the Visualization....63
Viewing sample Xcelsius 2008 visualizations....64
To view sample Xcelsius 2008 visualizations....65
Using Templates....65
To View Xcelsius 2008 Templates....66

Chapter 5 Creating and Updating Xcelsius 2008 Visualizations 67

Creating a visualization....68
Step 1: Add Spreadsheet Data....68
Step 2: Link components to the spreadsheet....68
Step 3: Preview and publish the visualization....69
Updating data for a visualization....70
Updating the Embedded Spreadsheet....71

Chapter 6 Using Xcelsius 2008 Components 73

Overview....74
Using the Chart components....74
How to configure a chart....79
User Guide Sample: Drill-Down Chart....81
User Guide Sample: Dual Axis Charts....83
Using the Container components....85
User Guide Sample: Panel Container....86
User Guide Sample: Tab Set....87
Using the Selector components....89
User Guide Sample: Filter....95
User Guide Sample: List Builder....96
User Guide Sample: Accordion Menu....99
User Guide Sample: Sliding Picture Menu....100
User Guide Sample: Dynamic Selected Item....102

User Guide Sample: Filtered Rows....104
User Guide Sample: Tree Map....105
Using the Single Value components....107
User Guide Sample: Value Display....109
Using the Map components....111
User Guide Sample: Map 112
Using the Text components....113
Using the Other components....114
Using the Local scenario button component....118
User Guide Sample: Calendar component....119
User Guide Sample: Grid 121
User Guide Sample: History....122
User Guide Sample: Reset Button....124
User Guide Sample: Trend Analyzer....125
Using the Art and Background components....127
How to use the Image component....128
Using the Web Connectivity components....130

Chapter 7 Exporting Xcelsius 2008 Visualizations 133

Overview....134
Exporting your visualization to PowerPoint....134
To export an Xcelsius 2008 visualization to PowerPoint....134
Exporting your visualization to Adobe PDF....135
To export an Xcelsius 2008 visualization to Adobe PDF....135
Emailing your visualization with Outlook....136
To email an Xcelsius 2008 visualization with Outlook....136
Exporting your visualization to Word....136
To export an Xcelsius 2008 visualization to Word....136
Exporting your visualization to Flash....137
To export an Xcelsius 2008 visualization to Flash....137
Exporting your visualization to HTML....137

To export an Xcelsius 2008 visualization to HTML....137
Exporting your visualization to an Enterprise folder....138
To export an Xcelsius 2008 visualization to an Enterprise folder....138
Taking a Snapshot of your visualization....139

Chapter 8 Using Advanced Features 141

Overview....142
Dynamic Visibility functionality....142
User Guide Sample: Dynamic Visibility....142
User Guide Sample: Status List....144
Ignore End Blanks for variable length ranges....146
Alerts....148
User Guide Sample: Alerts – Selectors....148
User Guide Sample: Alerts – Single Value....150
Creating templates....151
Custom-made templates....152

Chapter 9 Using Advanced Features in Xcelsius Engage 153

Using the Data Manager....154
To add a connection....155
To remove a connection....155
Configuring Connections with the Data Manager....156
Configuring QaaWS connections....157
Configuring Web Service Connections....159
Configuring the XML Data Connection....161
Configuring Flash Variables connections....176
Configuring Portal Data....180
Configuring Crystal Report Data Consumer Connections....183
Configuring FS Command Connections....184
Configuring LCDS connections....185

Configuring LiveOffice Connections....188
Configuring Excel XML Maps Connections....189
Building the visualization....190
Sample visualization: Excel spreadsheet with an XML map 190
Usage Tab....191

Chapter 10 Using Advanced Features in Xcelsius Engage Server 193

Xcelsius 2008 Integration with SQL Server Reporting Services....194
Xcelsius 2008 and SQL Server Reporting Services....194
Xcelsius 2008 Portal Integration....195
Xcelsius 2008 for Portals....195
Deploying Xcelsius 2008 Visualizations to Microsoft Sharepoint....195
Step 1: Add Xcelsius 2008 to a Sharepoint web page....196
Step 2: Configure the Xcelsius 2008 Sharepoint web part....196
Step 3: Connect the web part to other web parts....197

Chapter 11 Using Advanced Features in BusinessObjects Xcelsius Enterprise 199

Business Objects Platform Integration....200
Overview....200
Moving from an unmanaged environment to a managed environment.201
Using LiveOffice data for Xcelsius 2008 visualizations....202
Storing Xcelsius 2008 files in Crystal Reports Server or BusinessObjects Enterprise....205
Managing Xcelsius 2008 files in Crystal Reports Server or BusinessObjects Enterprise....208
Updating LiveOffice connection settings after system migration....215
Launching an InfoView document from Xcelsius 2008....216
Opening an Infoview SWF with Xcelsius 2008....218

Chapter 12 Frequently Asked Questions 221

Installation questions....222
Do I need to install Adobe Flash to use Xcelsius 2008?....222
Why doesn't Xcelsius 2008 function after I upgrade or install Microsoft Office?....222
Embedded Spreadsheet questions....222
Why doesn't my Excel formula paste correctly?....222
Why does the look of my component change when I copy it into a new visualization?....223
Why doesn't my visualization display my spreadsheet customization?.223
LiveOffice questions....223
Language questions....224
Microsoft Excel questions....224
Can I re-import an Excel file with a renamed spreadsheet?....224
Why does my table look different than my Excel spreadsheet?....224
Microsoft PowerPoint questions....225
How can I embed an Xcelsius 2008 SWF file into an existing PowerPoint presentation?....225
Troubleshooting questions....225
Why doesn't my component show scientific formatting?....225
Why doesn't my URL button work?....225
What happened to the scenarios I saved?....225
Why can't I drag my Slider, Dial, or other single value component?...226
Why do I receive a Server Busy message?....226
Why do I receive the message "A script in this movie is causing Flash Player to run slowly..."?....226
Why does my visualization start in a strange state?....226
Why are formula-based indexes for my VLOOKUP array not changing at runtime?....227
Why are my URL-based images not visible in preview mode?....227
Why isn't my visualization connecting with its external data source?.228

Questions about supported features....228
What Excel functions are supported by Xcelsius 2008?....228
What is the maximum limit of rows for a single range selection?....228
Does Xcelsius 2008 support Excel files that link to other Excel files?.228
How large can my Excel file be?....229
Which regional Excel formats does Xcelsius 2008 support?....229
Why don't my Excel macros work?....230

Chapter 13 General Properties Panel Reference 231

Overview....232
Common buttons....232
Cell Selector button....232
Color Selector button....232
Manual Edit button....233
Information button....233
Appearance tab....234
Layout tab....234
Text tab....234
Behavior Tab....239
Common tab....239
Animations and Effects tab....240
Alerts Tab....241
Enable Alerts....241
Alert Variable....242
Alert Thresholds....242
Enable Auto Colors....242
Color Order....245
Alert Location....245

Chapter 14 Chart Components Reference 247

Overview....248
General tab....248
Titles....248
Data....249
Drill Down tab....252
Enable Drill Down....252
Behavior tab....255
Common tab....255
Scale tab....257
Animations and Effects tab....259
Appearance tab....259
Layout tab....259
Series tab....262
Axes tab....264
Text tab....266
Color tab....266
Alerts Tab....267

Chapter 15 Container Components Reference 269

Overview....270
General tab....270
Behavior tab....271
Common tab....271
Appearance tab....272
Overview....273
General tab....273
Behavior tab....274
Common tab....274

Animations and Effects tab....275
Appearance tab....275

Chapter 16 Selector Components Reference 277

Overview....278
General tab....278
Display Data....279
Display Value....279
Images....280
Data Insertion....280
Orientation....282
Specific to the Filter component....283
Specific to the List Builder component....283
Specific to the Accordion Menu component....284
Behavior tab....285
Common tab....285
Animations and Effects tab....286
Specific to the Label Based Menu component....286
Specific to the Sliding Picture Menu component....287
Specific to the Spreadsheet Table component....288
Specific to the Ticker Component....289
Specific to the Accordion Menu component....289
Specific to the Play Selector Component....289
Specific to the Fisheye Picture Menu component....290
Appearance tab....290
Layout Tab....290
Text tab....294
Color tab....295
Alerts tab....300

Chapter 17 Single Value Components Reference 301

Overview....302
General tab....302
Title....302
Data....302
Scale....303
Behavior tab....304
Common tab....304
Animations and Effects tab....308
Appearance tab....308
Layout tab....308
Text Tab....310
Color tab....311
Alerts tab....312

Chapter 18 Map Components Reference 313

Overview....314
General tab....314
Title....314
Region Keys....314
Display Data....315
Insertion Type....316
Source Data....316
Destination....316
Behavior tab....316
Appearance tab....317
Layout Tab....317
Text Tab....318
Color Tab....318

Alerts tab....319

Chapter 19 Art and Background Components Reference 321

Overview....322
General tab....322
Common to some components....322
Specific to Background components....323
Specific to Shape components....323
Specific to Line components....325
Specific to the Image component....325
Behavior tab....326

Chapter 20 Text Components Reference 329

Overview....330
General tab....330
Default Text....330
Data Insertion....331
Specific to Label....331
Behavior tab....332
Common tab....332
Animations and Effects tab....335
Appearance tab....335
Layout tab....335
Text tab....336
Color tab....336
Specific to Label....337

Chapter 21 Web Connectivity Components Reference 339

Overview....340
General Tab....340

Common to most components....340
Specific to the Slide Show component....341
Specific to URL Button component....342
Specific to the Connection Refresh Button component....342
Specific to Reporting Services Button....343
Behavior tab....345
Common tab....345
Animations and Effects tab....348
Appearance tab....349
Layout tab....349
Text tab....349
Color tab....349
Specific to Slide Show component....350

Chapter 22 Other Components Reference 353

Overview....354
General tab....354
Common to some components....354
Specific to the Trend Analyzer component....355
Specific to the Calendar component....356
Specific to the Grid component....357
Specific to Trend Icon component....358
Specific to the Panel Set component....359
Specific to the History component....360
Specific to the Source Data component....361
Behavior tab....361
Common tab....361
Specific to the Calendar component....362
Specific to the Grid component....363
Specific to the Panel Set component....365
Specific to the Print Button component....366

Specific to the Source Data Component....366
Animations and Effects tab....366
Appearance tab....367
Layout tab....367
Text tab....368
Color tab....369
Alerts tab....369

Chapter 23 Supported Excel Functions 371

Supported Excel Functions....372

Index 375

Contents

Xcelsius 2008 Versions Available

chapter 1

This user guide is applicable for all versions of Xcelsius 2008. The following versions are available:

- Xcelsius Present
- Xcelsius Engage
- Xcelsius Engage Server
- BusinessObjects Xcelsius Enterprise

Xcelsius Present is the entry level product version. It is intended for users who wish to create visualizations with Excel data only. Xcelsius Present does not offer connectivity to external data sources. This version has a robust suite of the most commonly used components. It also features the most commonly used visualization export options.

Xcelsius Engage has all of the features of Xcelsius Present. It offers additional components as well as additional visualization export options. It is intended for users who need to connect to an external data source.

Xcelsius Engage Server provides all of the features of Xcelsius Engage. In addition, it offers integration capabilities with web portals and Reporting Services. Xcelsius Engage Server is bundled with Flynet Web Services Generator. It is intended for users who wish to create visualizations that are deployed in a portal environment.

BusinessObjects Xcelsius Enterprise provides all of the features of Xcelsius Engage. In addition, it offers integration capabilites with web portals and Reporting Services. BusinessObjects Xcelsius Enterprise integrates with the BusinessObjects platform, including Query as a Web Service (QaaWS), LiveOffice, and Crystal Reports. It is intended for users who wish to create visualizations that are deployed in a BusinessObjects Enterprise environment.

Application Overview

chapter 2

What is Xcelsius 2008?

Xcelsius 2008 is a leading-edge Microsoft Windows application that brings data to life!

Using breakthrough technology, Xcelsius 2008 bridges the gap between data analysis and visual presentation, empowering users of all proficiencies to create visually stunning interactive reports and applications.

With Xcelsius 2008, users can communicate data in a clear and powerful style that's appealing to the mind and to the eye.

Xcelsius 2008 is intuitive enough for beginners and versatile enough for advanced users. Most importantly, it makes the process of generating reports and applications fun, without requiring users to learn arcane programming languages. With Xcelsius 2008, simply pointing and clicking your mouse can create rich interactive presentations. Your only limitation is your imagination.

Xcelsius 2008 offers tight integration with Microsoft Corporation's ubiquitous Office products. This tight integration lets you attach your reports to Microsoft Outlook e-mail messages or embed them into PowerPoint slides using just a single mouse click!

The Technologies That Drive Xcelsius 2008

Xcelsius 2008 combines two of the most widely used software applications in the world:

- Microsoft Excel
- Adobe Flash Player

Microsoft Excel is one of the most popular software programs today. It is a member of the Microsoft Office family of products and is used daily by millions of people around the world to create reports.

Adobe Flash Player is widely used to view applications developed in Adobe Flash. According to Adobe, there are roughly 516 million computers with the Flash Player (as of March 2003).

With these figures, it is almost a certainty that your personal computers – at home and at the office – already have Microsoft Excel and Adobe Flash Player installed. The synergy derived by integrating these two widely deployed applications allows Xcelsius 2008 to leverage years of sophisticated

programming and proven IT and business technologies. The result is a winning combination that raises the standard in terms of power and usability.

What Skills Does a User Need?

Xcelsius 2008 is uniquely designed to be easy and enjoyable to use. Since its underlying technology is Microsoft Excel, the only skills a user needs to create striking visual effects in their reports is a basic understanding of how Excel works. No additional training is required!

What's New in Xcelsius 2008

chapter 3

Embedded Spreadsheet

Xcelsius 2008 now provides an embedded spreadsheet which is a fully functional Excel workbook incorporated into Xcelsius 2008. The Embedded spreadsheet allows you to create, edit, and manipulate model data directly in your Xcelsius 2008 file, without the need to import or re-import Excel spreadsheets.

New Components

Xcelsius 2008 now provides the following new components:

- Tree Maps



  Tree Maps are visualizations that display hierarchical data in a small area. In Xcelsius 2008, Tree Maps have two parameters: size and color intensity.

- Reset Button



  The Reset Button allows the end user to revert to the visualization's original settings after changing data at runtime.

- New Maps

  Additional maps have been added that cover Europe and Asia-Pacific countries. A new map of the US that includes Alaska and Hawaii has also been added.

- Print Button



  The Print Button allows a user to print the SWF file directly from the browser.

Xcelsius Engage new components

In addition to the components available in Xcelsius 2008, Xcelsius Engage provides the following components in all versions:

- Panel Container



A Panel Container acts as a smaller canvas within the main canvas and holds one or more components. Components in the Panel Container can be moved, added, changed, or deleted. Panels can be placed anywhere on the canvas.

- Tab Set



Tab Set is similar to Panel Containers. The Tab Set acts as a smaller canvas within the main canvas. A Tab Set contains multiple tab views; each can be displayed on the canvas by clicking its corresponding tab.

- Trend Analyzer



The Trend Analyzer combines data analysis and visualization. The component analyzes the data selection and provides an additional data series that can be plotted to display a trend line.

- History



The History component tracks and displays the history of changes in a selected cell. This allows you to easily see the effect of changes in worksheet data.

- Connection Refresh Button

  The Connection Refresh Button is linked to one or more data connections that retrieve data from an external source. Adding the Connection Refresh Button to your visualization allows users to refresh the data on demand.

- Reporting Services Button



  The Reporting Services Button component enables you to connect to the Xcelsius Reporting Services (XRS) server and select the report that will be used to populate the visualization. The XRS server is a web service that allows Xcelsius to communicate with your SQL Server Reporting Services (SSRS) server. Use of XRS requires an installation on your web server. Please refer to the XRS documentation included on the CD for more information.

- Source Data



  The Source Data component indexes the selected source data range. This component does not have a visual display; it works within the visualization in combination with other components.

New Features

Xcelsius 2008 now provides the following new features:

- Alerts for selectors

  Alerts can now be added to the following selector components: Label Based Menu, Combo Box, List Box, List Builder, and Ticker.

- Insert Filtered Rows

A selector component can be bound to a Source Data range of multiple rows with duplicate labels; when a label is selected, the component will filter the range to insert only the rows corresponding to that label.

- Dynamic Selected Item

  In list-based selectors, the labels can by changed dynamically through another component in the model.

- Trigger Key

  Trigger keys are bound to variable cells and are set to fire when the cell value matches a target value. Trigger keys are used to trigger data connections and are also available in the URL Button and Connection Refresh Button.

- Dual Axis Charts

  Xcelsius 2008 now has the ability to plot series data on both a primary and a secondary axis. This is available for the following charts: Line, Bar, Stacked Bar, Column, Stacked Column, Area, Stacked Area, and Combination Chart.

New Functions

Xcelsius 2008 now provides the following new functions:

- Copy/paste components across XLF files

  Once you have set up a component in an XLF, you can reuse the component by copying and pasting it into other XLFs. The component will attempt to retain the same binding references and appearance.

- Printing

  Visualizations can now be printed during Preview mode or from the exported SWF.

New Functions in Xcelsius Engage versions:

In addition to the functions in Xcelsius 2008, Xcelsius Engage provides the following functions:

- Data Manager

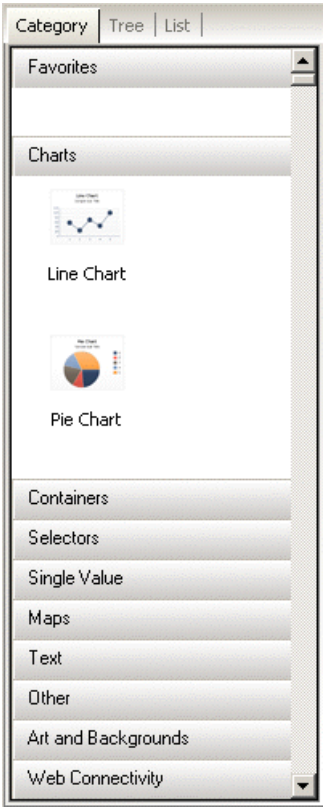
External connections are now managed in a central location. The Data Manager is used to configure and manage all external data connections.

- Crystal Reports integration

  Xcelsius 2008 visualizations that are embedded in Crystal Reports can be configured to read data from the hosting Crystal Report and dynamically update when the Crystal Report data changes.

Appearance

- Components Browser



The Components Browser look and feel has been significantly changed from previous versions.

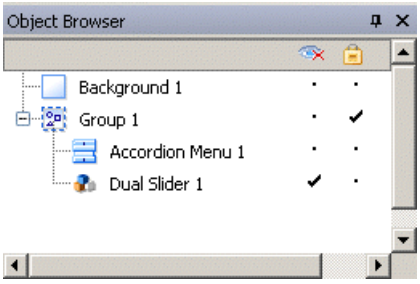
- Interface

The Components Browser displays the components in a sliding accordion menu. Components can be displayed in Category, Tree, or List view.

- Favorites

  Frequently used components can be added to the Favorites category in the Category view.

- Object Browser



  - Lock/Unlock 

    Components can be locked in the object browser to prevent them from being selected or changed while the visualization is being designed.

  - Move forward/back

    Components can easily be moved forward or backward in layers of the visualization by dragging the component or group towards the top or bottom of the Object Browser, or by selecting selecting a component or group and clicking the directional arrows at the bottom of the Object Browser.

  - Group/Ungroup

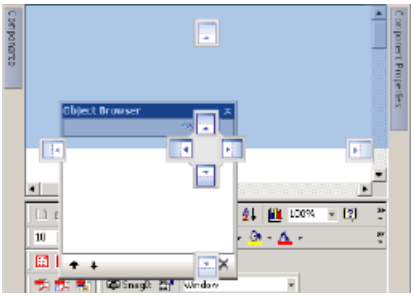
    Grouped components appear as subsets in the Object Browser. Components can be added to or removed from a group into or out of the group in the Object Browser.

  - Hide/Show 

    Individual components and groups can be hidden or shown by clicking on the dot or checkmark located in the column under the Hide icon. All components on the canvas can be hidden/shown by clicking on the Hide icon.

- Docking

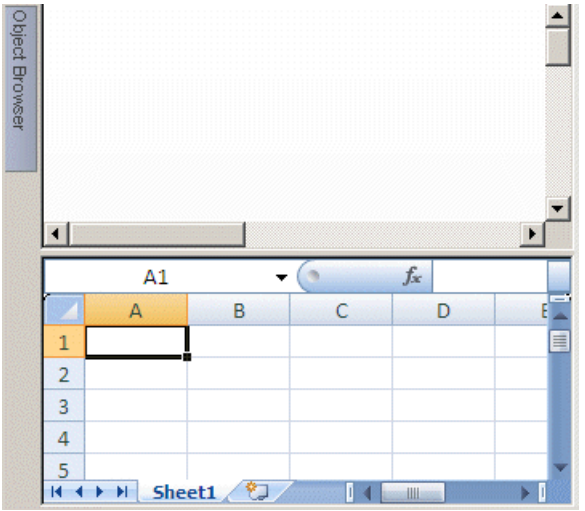
The Components, Object, and Properties Browsers can be moved by clicking on a browser's title bar and dragging it to dockable areas on the canvas. Mouse over an arrow (displayed while a browser is being dragged) and Xcelsius 2008 will highlight the corresponding docking location.

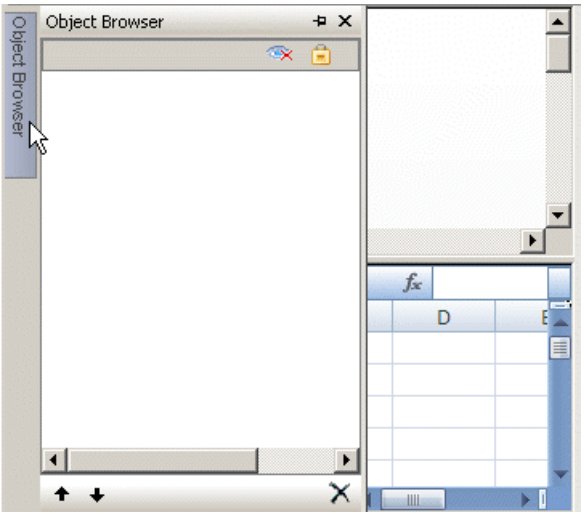


- Auto-hiding

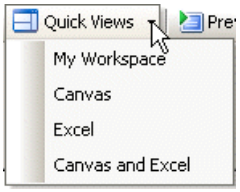
  To increase screen space for the canvas, the Components, Objects, and Properties Browsers can be minimized to the margins of the display. A display tab is shown for minimized browsers; hovering over the tab displays the browser window.

  The images below show the Object Browser minimized (top image) and displayed on mouse over (bottom image).


Object Browser
A1
A
B
C
D
1
2
3
4
5
Sheet1


Object Browser
Object Browser
D

- Quick Views



Xcelsius 2008 includes pre-configured workspace configurations. In addition, your customized workspace is automatically saved as My Workspace when Xcelsius 2008 closes. You can select a different workspace view from the Quick Views menu.

Importing a Crystal Xcelsius 4.5 file into Xcelsius 2008

Xcelsius supports the ability to import a visualization created with Xcelsius 4.5. This import ability lets Xcelsius 4.5 customers upgrade their existing visualizations to take advantage of the new features of Xcelsius 2008. Backup your current XLF, JPEG, and external SWF files before upgrading your visualization.

Note: Xcelsius 3.0, 3.5, and 4.0 files cannot be imported into Xcelsius 2008. To use these files in Xcelsius 2008 you must first import them into Xcelsius 4.5, then import the files into Xcelsius 2008.

To import your existing visualizations, start Xcelsius 2008 and select **File** > **Open**. Select the XLF that you would like to import and click Open. Xcelsius 2008 will detect that the XLF is an older visualization and warn you that it is going to import the visualization into Xcelsius 2008, and that this may result in certain features not functioning.

Note: After you import and save your visualization with Xcelsius 2008, the visualization cannot be opened using an earlier version of Xcelsius.

Xcelsius 2008 minimizes the impact of migrating visualizations from Xcelsius 4.5. However, it is possible that some of your visualizations, or more specifically, some components, will look slightly different from the original file.

The following are some of the most frequently encountered changes:

- The size of some components is different. In most cases the size difference is a matter of a few pixels.

- Due to art improvements, some custom colors appear to be slightly different.
- The Spreadsheet Table component differs in size and formatting.

In the event of formatting differences in your components, bring up the Properties panel for the component and re-bind any properties that are tied to the cells in the spreadsheet.

Getting to Know Xcelsius 2008

chapter 4

Overview

This section provides an introduction to Xcelsius 2008, the components of the program, and the functionality of the program.

Understanding the Xcelsius 2008 system

Xcelsius 2008 visualizations conform to SWF file format. SWF is the vector-based graphics format designed to run in the Adobe Flash Player. Because a SWF file is vector-based, its graphics are scalable and play back smoothly on any screen size and across multiple platforms. Also, a vector-based file usually has a smaller file size than other animations.

Xcelsius 2008 files are stored in a zipped format with an XLF extension. The XLF file format contains the Xcelsius 2008 visualization information and its associated embedded spreadsheet file.

Note: Xcelsius 2008 requires Flash version 9 or later. Newer Flash versions have security features which may prevent your Xcelsius 2008 visualization from connecting with an external data source. Without a policy file, SWF files from one domain cannot access data on another domain or sub-domain. In addition, SWF files served over HTTP cannot access data at an HTTPS location. Please refer to the online article from Adobe regarding security restrictions for data loading for information on creating a policy file to allow access to data in the cases above.

How Xcelsius 2008 differs from traditional reporting applications

Xcelsius 2008 complements all types of Portal initiatives, Business Intelligence programs, Executive Dashboards, Balanced Scorecard projects, Marketing Reports, and day-to-day reporting and presentation requirements. Xcelsius 2008 does this by letting end users participate in the report creation process and analysis.

How Xcelsius 2008 works

There are three steps to create an Xcelsius 2008 visualization:

1. Add data to the spreadsheet.
2. Build the visualization.
3. Publish the visualization.

For detailed instructions on creating visualizations, see *Creating and Updating Xcelsius 2008 Visualizations* on page 67.

How visualizations look

Visualizations created with Xcelsius can have any type of standard or personalized look. Visualizations are also fully compatible with Microsoft Power Point, HTML, and Portals.

Xcelsius visualizations conform to SWF file format. SWF is the vector-based graphics format designed to run in the Flash Player. Because a SWF file is vector-based, its graphics are scalable and play back smoothly on any screen size and across multiple platforms.Also, a vector-based file usually has a smaller file size than a bitmap animation.

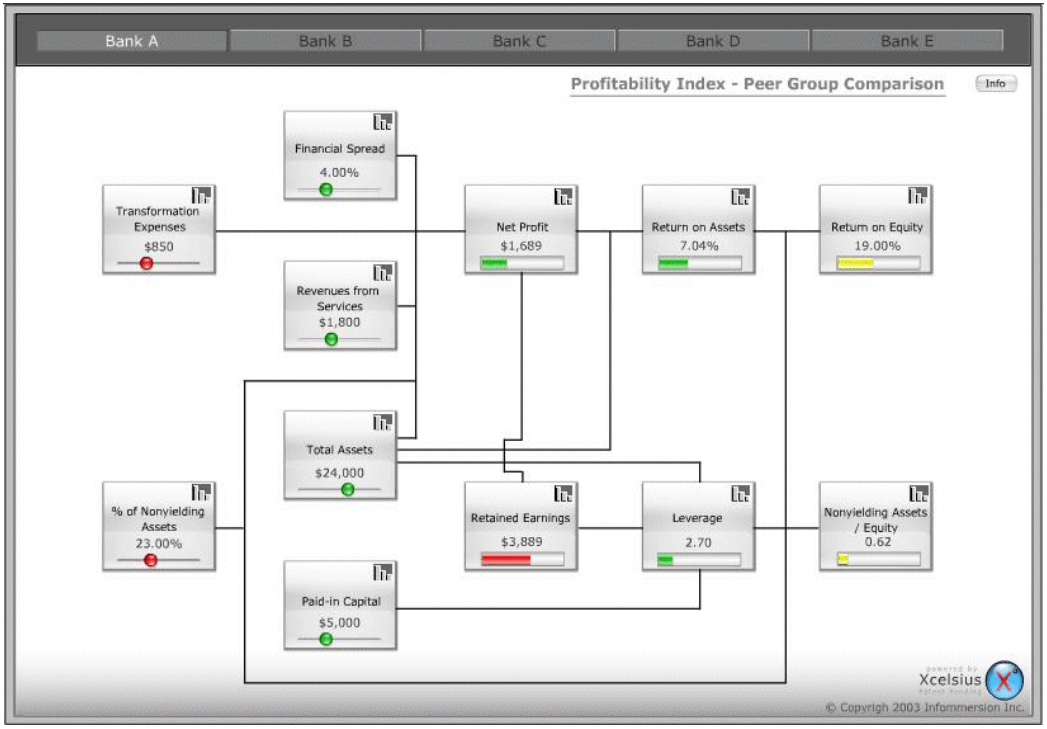
Visualizations created with Xcelsius are dynamic. What-if scenarios let users adjust conditions on the visualization and view the results. Interactive components let users alter the visualization conditions.

The following examples show visualizations created with Xcelsius.

Example 1: What-if presentation using alerts

This visualization shows the return-on-equity (ROE) for a financial institution against its peer group performance. The alert colors are triggered, comparing

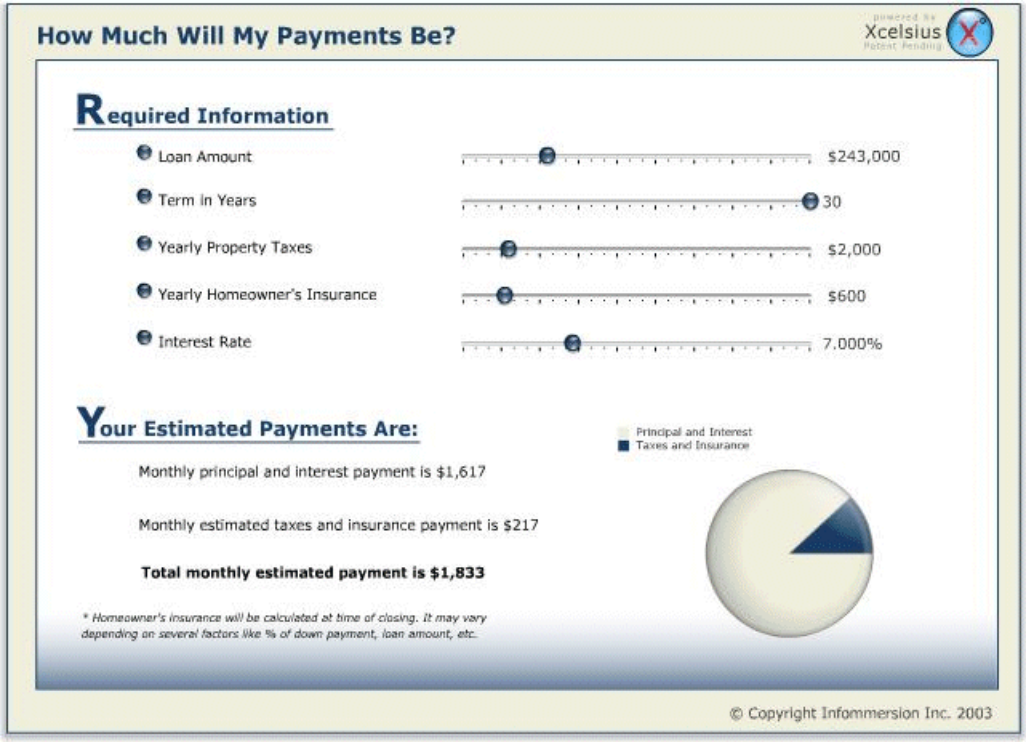
the selected bank against the peer group average.



Example 2: What-if presentation using a calculator

The following visualization was created to calculate the monthly payment for a home loan. Users can adjust the input values by moving the sliders. The

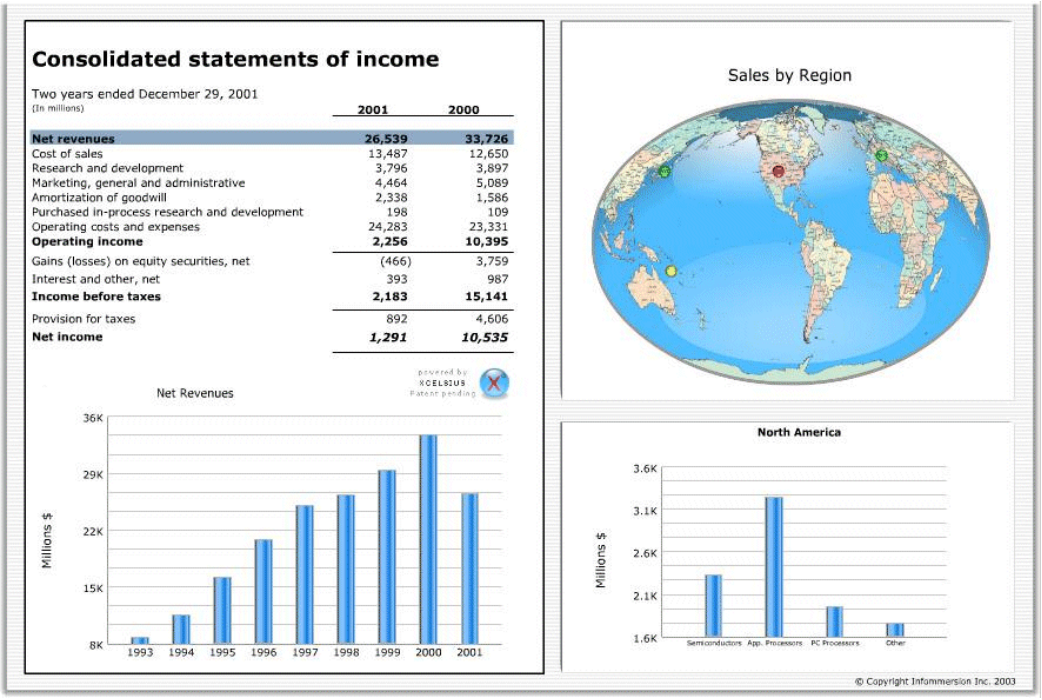
calculator dynamically changes and displays the new values.


How Much Will My Payments Be?
Xcelsius
Required Information
Loan Amount
$243,000
Term in Years
30
Yearly Property Taxes
$2,000
Yearly Homeowner's Insurance
$600
Interest Rate
7.000%
Your Estimated Payments Are:
Principal and Interest
Taxes and Insurance
Monthly principal and interest payment is $1,617
Monthly estimated taxes and insurance payment is $217
Total monthly estimated payment is $1,833
* Homeowner's insurance will be calculated at time of closing. It may vary depending on several factors like % of down payment, loan amount, etc.
© Copyright Infommersion Inc. 2003

Example 3: Historical data comparison presentation

The following visualization is a dynamic financial statement report. It shows the traditional Statements of Income. When a user clicks on an account, the visualization shows the historical data organized by region or as a comparison

against competitors.



Understanding the Xcelsius 2008 tools

Before you begin using Xcelsius, take a moment to familiarize yourself with the interface by reading the following section. In this section you will learn about Xcelsius elements, browsers, tools, and other options.

Note: To view a browser, select the browser from the View menu. In the View menu, a check mark next to the browser name indicates that the browser window is open; if you cannot see the browser in your workspace, it may be minimized at the perimeter of the Xcelsius window.

Using the Components Browser

The Components Browser shows the available components that can be added to your model.

The window contains three views:

- Category View
- Tree View
- List View

Category View

The components are grouped in a sliding accordion menu according to their functionality.



You can navigate to a component in the Category view of the Components Browser by clicking on a category title or dragging the scrollbar until you reach the desired category.

- Favorites

- Charts
- Containers (available only in Xcelsius Engage 2008)
- Selectors
- Single-Value
- Maps
- Text
- Other
- Art & Backgrounds
- Web Connectivity

Note: To add a component to Favorites, navigate to the component in the Category view, right-click on its icon and select **Add To Favorites**. To delete the component, right-click the icon in the Favorites category and select **Remove From Favorites**.

List View

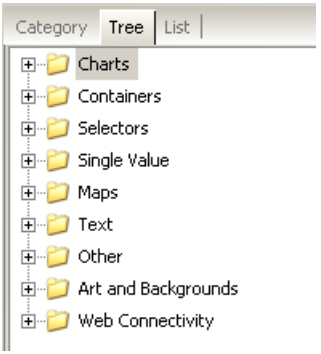
In the List View, the components are organized alphabetically.



To navigate in the List View, click anywhere within the window, then type the first letter of the component you wish to open, or drag the scrollbar until you reach the desired component.

Tree View

In Tree View the components are organized in folders according to their category.



Note: The List and Tree views do not contain the Favorites category. Favorites can only be viewed or added in Category view.

Using the Canvas

The canvas area is the white work area where you place components to create a visualization.

The canvas color can be customized using its Properties panel. If the Properties panel is not open, double click anywhere on the canvas to open the panel.

Placing components on the canvas using drag and drop

1. On the **Components Browser**, click a component.
2. Holding down the left mouse button, drag the component onto the canvas.
3. Release the mouse button.

   The component is dropped on the canvas at the location of the mouse pointer.
4. Repeat this procedure for each component.

Placing components on the canvas using point and click

1. On the **Components Browser** click a component.
2. Click the canvas area.

   The component is dropped on the canvas at the location of the mouse pointer.
3. Repeat this procedure for each component.

Fitting the canvas to components

After you complete your visualization, you may want to adjust its final size to eliminate any surrounding white area.

 To do this, use the Fit Canvas to Components button on the tool bar. Your visualization size will be adjusted to the minimum size according to the components placed on the canvas.

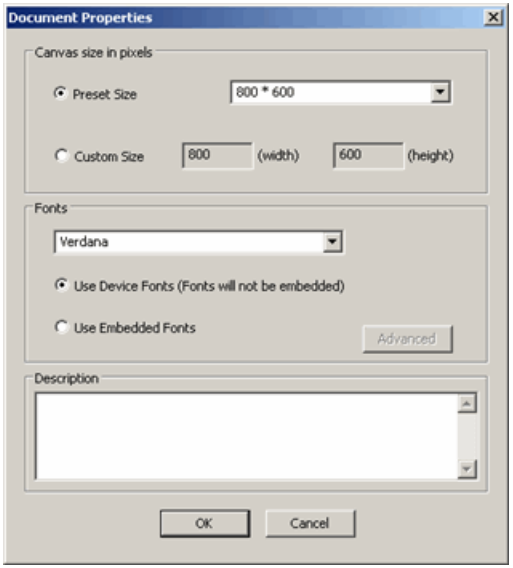
 In addition, you can use the Increase Canvas and Decrease Canvas buttons on the toolbar to shrink or grow the canvas in small increments.

Fitting the canvas to the window

 To resize the canvas so that it fills the workspace, click Fit Canvas to Window on the toolbar.

Changing the canvas size

You can change the canvas size before you start creating a visualization by clicking **Document Properties** on the **File** menu. The Document Properties dialog box appears.



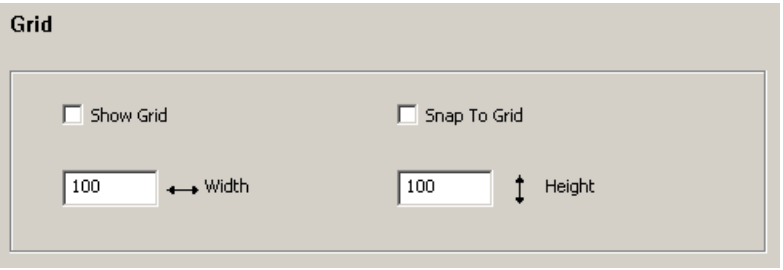
You can modify the preset size to some standard sizes, or you can create your own size. The ideal size of your visualization depends on the quantity of components that you plan to use.

If you are building a simple visualization that contains a chart and slider, the size can be around 640x840. Use the full size screen for dashboards or one-page visualizations that contain several charts and selectors.

In the description field, you can write a brief description of your visualization, the author, the date, and its intended functionality. This information will appear to all other designers when they use your XLF file or when you save your visualization as a template.

Using the Grid Tool

The Grid command on the Preferences menu provides a layout tool that can aid in positioning components on the canvas. Select **File > Preferences > Grid** to open the Grid Tool.



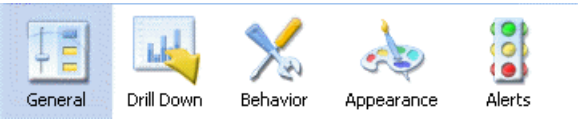
The following options for customizing the grid are available:

- Show Grid. This option controls the visibility of the grid.
- Snap to Grid. This option aligns the selected components to the grid lines.
- Height. This option sets the vertical spacing intervals for the grid in pixels.
- Width. This option sets the horizontal spacing intervals for the grid in pixels.

Using the Properties panel

The component Properties panel contains the setting and format options for the selected component. After you place a component on the canvas area, you can access the Properties panel by double-clicking the selected component, right-clicking on the component, or selecting the component and typing **ALT**+**ENTER**. In general, the Properties panel has the same structure for all components, but the options available are specific to each individual component.

The Properties panel may have the following tabs:



- **General**



The General tab contains the required settings for the selected component. At a minimum, it contains an area for the title or label(s), and an area to select the Data Source or enter the values that will be displayed.

- **Drill Down**



The Drill Down tab ontains a series of parameters for adding drill-down capability for charts. For information on the Drill Down tab, see *Drill Down tab* on page 252.

Note: This tab applies only to Chart components.

- **Behavior**



The Behavior tab contains settings related to the way the component will work in the visualization. Typically, it contains areas for defining the functions related to limits, interactivity, and dynamic visibility. See *Dynamic Visibility functionality* on page 142 for more information.

- **Appearance**



The Appearance tab contains a series of settings areas, and in some cases sub-tabs, that let you modify the appearance and formatting of components. On this tab you will find options like font size, title location, and colors.

- **Alerts**



The Alerts tab contains all the parameters available for using alerts. On this tab, you can define the number of alert colors, the colors used, and the target limits. See *Alerts* on page 148 for more information.

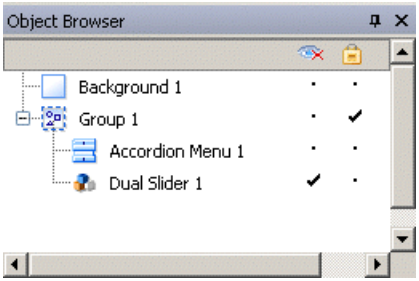
Properties for multiple selections

By selecting multiple components on the canvas, you can simultaneously edit Properties for the components in your selection. To access Properties for multiple components select your components and double click the selection. You can also access the Properties by right-clicking the selection and selecting **Properties** from the context menu.

If the components are of the same type, you will be able to edit Properties specific to that component type. For example, if your current selection contains three Line Chart components, you will be able to access the Properties specific to the Line Chart. Any change made to the Properties will apply to all components in the selection. The Properties panel selections with components of mixed types or groups are limited to the Dynamic Visibility parameters of the Behavior tab. When a number of components are grouped, the Properties for individual components within that group may be accessed by right-clicking on that sub-group component in the Object Browser window. See *Using the Object Browser* on page 48 for more information.

Using the Object Browser

In the Object Browser, you can select, hide, show, cut, copy, paste, delete, bring forward, move back, group, ungroup, lock, unlock, and access Properties panels of components.



The Object Browser can be docked in locations around the workspace or minimized as needed. If you have closed the Object Browser, click **Object Browser** on the **View** menu to re-open it.

Using the context menu

Display a context menu by right-clicking on any component in the browser or on the canvas.

The context menu provides access to many of the functions that are available in the Object Browser.

Selecting components

To select a component in the Object Browser, click the component name or icon to make it the active component on the canvas.

To select multiple components, click a component name or icon, and then hold down the **CTRL** key while you click additional components. To select a range of components, hold down the **SHIFT** key while selecting the range in the Object Browser, or click on the canvas and drag the cursor over a group of components.

Combine methods by selecting a group of components first with **SHIFT**+click and then other separate components using **CTRL**+click. Always select using **SHIFT**+click first; this will not work in reverse.

Select all components by selecting any component, then pressing **CTRL+A**.

Note: On the canvas, you cannot select components that are marked as hidden or locked. Those components can only be selected in the Object Browser.

Grouping components

Objects in the Object Browser can be grouped in the following ways:

- Select several components, then right-click on any of the components and select **Group** from the context menu.
- Select several components, then click n the toolbar.

Once grouped, the components will appear in the browser in tree form with a folder representing the group. Expand the group folder by clicking the + button or double-clicking the folder icon or the group label. Components can be dragged into and out of the group by dragging them to a different location in the browser tree.

To ungroup selected components, click on the toolbar or right-click on the group to access the context menu, then select **Ungroup**.

Hiding components

To hide a component in the Object Browser, click the dot in the column under the hide icon .

To hide a group, click the dot in the hide column for the group.

To hide all components, click the hide icon.

To show a hidden component or group, click the check mark under the hide icon. To show all hidden components and groups, click the hide icon twice.

Locking Components

Components and groups can be locked on the canvas to prevent any interaction with them. This can be helpful when there are many components laid out on the canvas. The component or group will only be selectable in the Object Browser.

To lock a component or group, click the dot under the lock icon . To unlock a group or component, click the check mark under the lock icon. All

components and groups can be locked by clicking the lock icon once, and all unlocked by clicking twice.

Deleting components

Delete any selected components by pressing **DELETE** or selecting Delete from the right-click context menu.

Tip: You do not need to ungroup components to delete components that are in the group.

Deleting a component can be undone pressing **CTRL+Z** or clicking **Undo** on the **Edit** menu.

Opening Properties panels

Properties panels for components, either alone or in a group, are opened using one of the following methods:

- Click the icon or label.

  Note: Slowly double-clicking the label will enable the Rename function instead of Properties.

- Select the component and press **ALT+ENTER.**
- Right-click the component and click Properties.

Properties panels for a group are opened separately from the Properties panels of individual components within the group:

- Right-click the group label or icon and click Properties.
- Select the group and press **ALT+ENTER.**

Note: Do not double-click a group to open its Properties panel; unlike individual components, double clicking on a group entry expands or collapses that group within the tree.

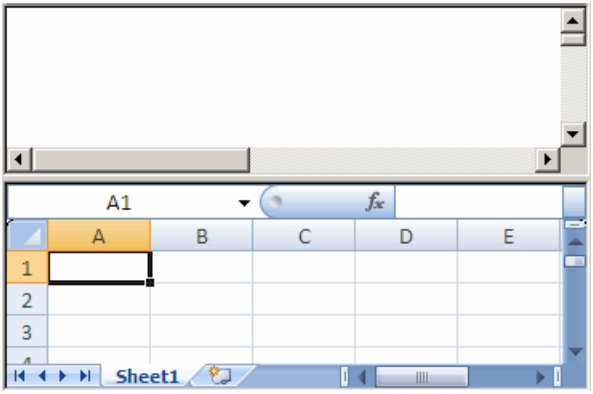
Once the Properties panel is opened for one component you can navigate to the Properties panel of another component or group by clicking on the entry in the Object Browser.

Renaming components

Each component is assigned a default browsing name when placed on the canvas. This is the name that appears in the title bar of the Properties panel and in the entry in the Object Browser.

You can override these default names to enter your own. Double-click slowly on the component name in the Object Browser to enable label edit mode. Type in a name and press **ENTER** or click on another component.

Using the Embedded Spreadsheet



The Xcelsius 2008 workspace incorporates an embedded spreadsheet. This fully functional spreadsheet is displayed below the canvas and contains the source data for your visualizations. You can add, modify, and delete your data directly within the spreadsheet without having to import or re-import an Excel spreadsheet.

There are several ways to bring data into the embedded spreadsheet:

- Import a spreadsheet from Excel. See: *Importing Excel spreadsheets* on page 55 .
- Copy/paste data from an Excel or Xcelsius 2008 file.
- Manually enter the data into the embedded spreadsheet.

You can bind cells in your embedded spreadsheet to components on your canvas.

Note: If you import a spreadsheet after linking to cells, the imported data will overwrite all data in the current embedded spreadsheet. The cell binding locations will remain the same, but the data may be changed.

You can also copy and paste cells between Xcelsius 2008 and Excel. Excel values and formulas can be copied into Xcelsius 2008, but conditional formatting of cells will not be retained.

Note: Xcelsius 2008 opens an instance of Excel that runs in the background. Although you can open a second instance of Excel, you will not be able to copy formulas between the instances. If you need to use Excel and Xcelsius 2008 files simultaneously, first open Xcelsius 2008, then open your Excel files by navigating to them using Windows Explorer and double-clicking on them.

If you need to keep synced Excel and Xcelsius 2008 files, we recommend making your updates in the Xcelsius 2008 embedded spreadsheet and then exporting the data to an Excel spreadsheet.

Note: Xcelsius 2008 imports Excel files by copying the spreadsheet data and inserting the data into the Xcelsius 2008 embedded spreadsheet. After the data has been imported, it is no longer linked to the original Excel spreadsheet. Any changes you make to the source file will not appear in the Embedded Spreadsheet, nor will any changes to the Xcelsius 2008 file appear in the original Excel file.

The embedded spreadsheet is a fully functioning Excel spreadsheet, complete with toolbars used in Excel.

If you are using Excel 2003, you will be able to see your default toolbars. Toolbar buttons not related to working with the data have been disabled (Save, Open, Print, etc.). These disabled buttons are function that are handled by Xcelsius. If you wish to Save the spreadsheet, use Xcelsius's File > Save function, or export the spreadsheet back to Excel. See *Importing Excel spreadsheets* on page 55 for more information.

If you are using Excel 2007, you will be able to see the ribbon displayed at the top of the program. In addition to the disabled buttons, the drop down menus are disabled in the ribbon.

For both versions of Excel, you can add Excel functionality to the toolbar by right-clicking on any toolbar and adding the toolbar with the desired function(s).

Embedded Spreadsheet

Although the embedded spreadsheet is a fully functioning Excel spreadsheet, not all Excel functions are supported. Xcelsius 2008 does not support macros, conditional formatting, or all available formula functions. For a full list of supported formula functions, see *Supported Excel Functions* on page 371.

Xcelsius 2008 does support the moving of bound data ranges. For instance, if your chart source data range needs to be moved down a row to fit in the title, simply select the range and move it to its new location. Xcelsius 2008 will retain the new information and reference the new range. However, if only part of the range is moved the bound cell reference will remain the same. You will need to open the component's Properties panel and re-bind the cell reference to the new location if only part of the range is moved and you want the new location referenced.

Note: The component's Properties panel will note reflect the updated range as the listed cell reference if a range is moved, expanded by inserting cells, or decreased by deleting cells. The new range is still bound and recognized by Xcelsius 2008.

The embedded spreadsheet allows you to change the sort order of your data. However, this action is not read as an event by Excel, and as such does not prompt Xcelsius to update. You will not see any component bound to the sorted data update with the new data order. The new sort will be reflected in Preview mode or the exported visualization. An update can also be forced by rebinding the range in the component.

Importing and Exporting data

Xcelsius 2008 uses an embedded Excel based spreadsheet as its data source. This provides the ability to copy and paste data between the Xcelsius 2008 embedded spreadsheet and an Excel spreadsheet. Source data can be created either in the embedded Xcelsius 2008 spreadsheet directly or in Excel and brought into Xcelsius 2008 . Smaller pieces of data can be copy/pasted or whole files can be imported.

Because Xcelsius 2008 files incorporate Excel data, spreadsheet data can easily be imported from Excel into Xcelsius 2008 or exported from Xcelsius 2008 to Excel.

Importing Excel spreadsheets

To use an existing Excel spreadsheet as the source data for your visualization, select **Data > Import** or use the Import Model button  on the toolbar to import the file.

Note: When the Excel file is imported the data is copied and is no longer connected to the original data. Editing the original source file will not change the data imported into Xcelsius.

WARNING: Importing an Excel spreadsheet will overwrite any data that is currently in the spreadsheet.

Exporting data to Excel

Select **Data** > **Export** to export the embedded spreadsheet data as an Excel file.

Using the Format menu

The Format menu provides various options for formatting the placement and layout of the components in the visualization.

Access to the Themes and Color Schemes dialog boxes is provided under the Format menu.

Note: These options are also available on the Format and Themes Toolbars.

Align

With the Align options, you can align the boundaries of components or groups of components relative to the first component in the selection. Align functions require the selection of at least two components.

The following Align options are available:

- Left
- Center
- Right
- Top
- Middle
- Bottom

Make Same Size

With the Make Same Size options, you can make the selected components the same width, height, or size relative to the first component in the selection.

Space Evenly

With the Space Evenly options, you can distribute a selection of components either horizontally (Across) or vertically (Down) so that there are even spaces between them.

Note: To use the Space Evenly options, you must have more than one component selected.

Center in Canvas

With the Center in Canvas options, you can center selected components on the canvas. You can center them vertically, horizontally, or both.

Other commands on the Format menu

The following commands are also available on the Format menu:

- Bring to Front. Brings component to the topmost layer.
- Send to Back. Sends component to the bottom layer.
- Bring Forward. Brings component forward one layer.
- Send Back. Sends component back one layer.
- Group. Groups selected components as a single item.
- Ungroup. Ungroups a group of components.

Understanding fonts in Xcelsius 2008

The following options are available for displaying fonts in Xcelsius 2008:

- **Device Fonts**

  By default, Xcelsius 2008 uses this option for components within a visualization. This option is recommended when creating models that require the extended character set as defined by Unicode. The Device Fonts option uses the SWF player to directly render the TrueType Font you select.

  Device Fonts also let you use different fonts for different components in the same visualization. However, depending on the TrueType Fonts installed on the end user's machine, the fonts in the visualization may not display properly.

- **Embedded Fonts**

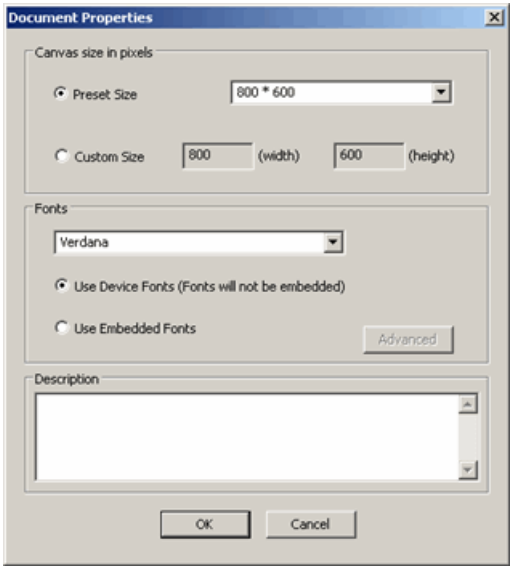
  This option generates the characters from the TrueType Font you select, and embeds them into the SWF file. Because the font is embedded in the SWF file, the font displays properly regardless of whether the user has the TrueType Font installed. However, this option increases the file size and the time required to load the visualization.

  Note: Asian character sets are not supported with Embedded Fonts due to the large number of characters they require. You must use Non-Embedded Fonts for situations where you require Asian characters.

To change the font for a visualization

1. On the **File** menu, click **Document Properties**.

   The Document Properties dialog box appears.



2. If you want to use one embedded font for all components in the visualization:
   a. On the **Font** list, click the font that you want.
   b. Click **OK**.
3. If you want to use a different font for each component in the visualization, or you want to use non-embedded fonts:
   a. Click **Use Device Fonts**.
   b. Click **OK**.

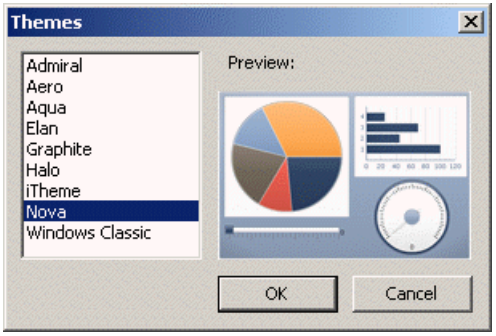
   You can now use the Font Settings on the Component Properties panel to change the font used for that component.

Using Themes

Themes (formerly Skins) allow you to globally change the appearance of components. Each theme has a number of different components that you can use to maintain the look and feel of that particular theme. Combined with Color Schemes, you can use Themes to create a multitude of different looks for your visualizations.

Select a theme from the main toolbar dropdown or from the **Format** menu.

The Themes dialog box contains a list of available Themes and a preview of each. Selecting a new Theme will apply the Theme to all existing components as well as new components.



Note: Some variations of a component type are only available when a particular Theme is applied (for example, half gauge is only in Graphite). Changing the Theme with these unique components on the canvas will change those components to the default for that category of component. However, the original component type is retained and will revert back to its original form if the Theme is changed back.

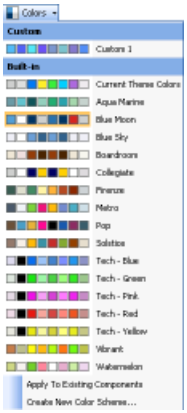
Using Color Schemes

Color Schemes (formerly Styles) alter the color palette of your visualization. You can customize your entire visualization, or only certain components. You can create your own Color Schemes based on an existing scheme or combination of custom colors. Color Scheme only affect the colors of components, and do not affect fonts, text formatting, or alerts.

Note: Color Schemes are not transferred with XLF files. If the Color Scheme used by an XLF is unavailable, the style will continue to be used by the existing componenets in the visualization, but it will not be able to be applied to new components.

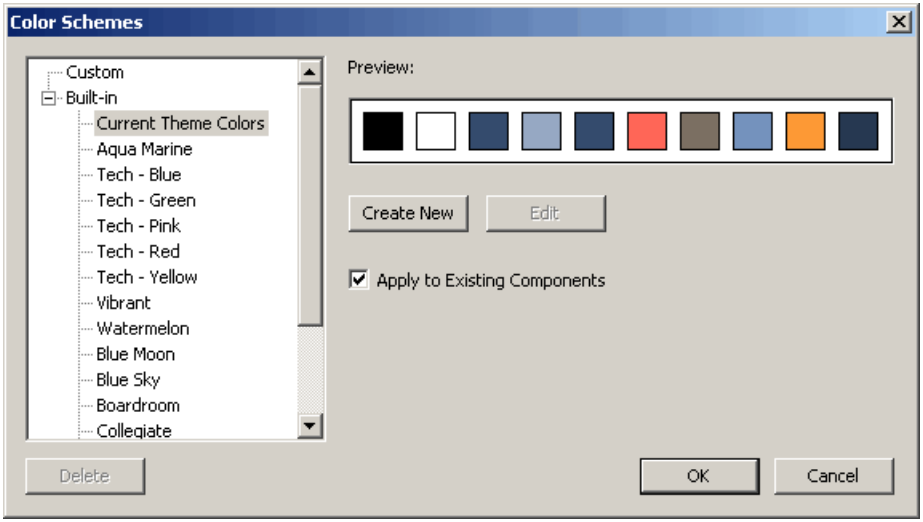
Changing the current Color Scheme

To change the current Color Scheme, click the color scheme icon on the Themes toolbar. Select a color scheme from the menu:



Select **Create New Color Scheme** to create a custom color scheme. See *Creating a Custom Color Scheme* on page 62

Alternatively, you can change the color scheme by selecting **Color Scheme** from the **Format** menu.



In the Color Schemes dialog box, select a color scheme from the list. Click **OK** to apply the selected Color Scheme to the components on the canvas. The Color Scheme that is applied to the visualization is displayed on the Component Explorer.

Note: There is a default color scheme associated with each Theme that cannot be modified. Select **Current Theme Colors** to revert to the original appearance of the visualization. Any color changes made will be reverted to their default values.

Selecting a new color scheme will affect all components placed on the canvas after the new scheme is applied. If you would like to change the color scheme of components already on the canvas, you will need to select **Apply To Existing Components**.

Click **Create New** to create a custom color scheme, or select a custom color scheme from the list and click **Edit** to modify the scheme.

Note: Only Custom color schemes can be edited.

For information on the Custom Color Scheme Dialog, see *Creating a Custom Color Scheme* on page 62

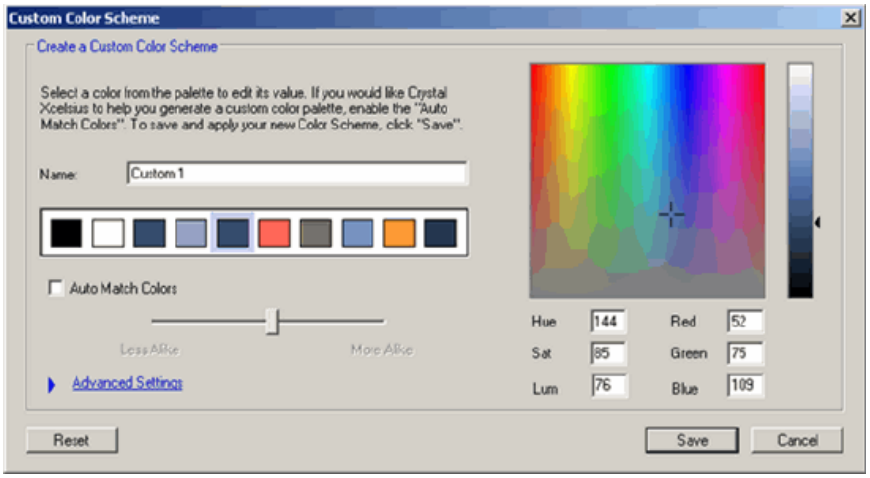
Creating a Custom Color Scheme

You can create custom Color Schemes by modifying the parameters of an existing color scheme.

To create a Custom Color Scheme

1. On the **Format** menu, click **Color Scheme** then select **Create New**, or select the Color Scheme icon from the toolbar and select **Create New Color Scheme** from the dropdown menu .

   The Color Schemes dialog box appears.



2. Select a color from the palette to edit its value.
3. Select a new color by clicking on the color picker or by manually entering the color values.
4. You can modify the other colors individually, or Xcelsius 2008 can automatically modify the other colors in the scheme to be more or less alike than the selected color. To do this, select **Auto Match Colors** and use the slider to adjust the colors.
5. Select **Advanced Settings** to access the advanced color menu. Here, you can set the colors for individual elements in the visualization.
6. Click **Save** to save the new Color Scheme.

7. Click **OK**.

   The new color scheme is the active color scheme and will be applied to any components that are added to the visualization. To apply the new color scheme, select **Apply to Existing Components**.

Note: Click **Reset** before saving the Color Scheme to revert to the originally assigned color settings.

Transferring Custom Color Schemes

Color Schemes are transferred with XLF files.

When a visualization with a custom color scheme is opened, the applied color palette will be displayed in the Colors toolbar icon. The custom color scheme will also be applied to any components added to the visualization. However, the Custom color scheme will not appear in the list of available Color Schemes. To add the transferred color scheme to the host machine, follow the steps for *Creating a Custom Color Scheme* on page 62.

Previewing the Visualization

With Xcelsius 2008, you can test run your visualization as many times as you need. It lets you experiment with various combinations of components, colors, and layouts to make sure your visualization functions according to your specifications.

Select **File** > **Preview** or use the Preview button  to toggle between the design view and Preview.

You can also select **File** > **Export > Preview** to view the visualization in your default web browser.

In Preview, you can interact with the visualization as you would when it is published.

Viewing sample Xcelsius 2008 visualizations

The sample visualizations included with Xcelsius 2008 show how some of the components and functions work.

Note: Samples include their own embedded spreadsheet data. Opening a sample will overwrite any data already in the embedded spreadsheet.

The following User Guide Samples are included with Xcelsius 2008 (Samples in **bold** have step-by-step instructions in this User Guide):

- **Accordion Menu**
- Alerts – Charts
- **Alerts – Selectors**
- **Alerts – Single Values**
- **Calendar**
- Check Box
- **Connection Refresh / XML Data Connection**
- **Drill-Down Chart**
- **Dual Axis Chart**
- **Dynamic Selected Item**
- **Dynamic Visibility**
- **Filter**
- **Filtered Rows**
- Fisheye Picture Menu
- **Filter**
- **Filtered Rows**
- Fisheye Picture Menu
- **Flash Variable Data Connection**
- **Grid**
- **History**
- Icon
- Ignore End Blanks
- Image
- Line Chart
- List Box
- **List Builder**

- **Map**
- **Panel Container**
- Play Selector
- **Reset Button**
- **Slider**
- Slideshow
- **Sliding Picture Menu**
- **Status List**
- **Tab Set**
- Ticker
- **Tree Map**
- **Trend Analyzer**
- **Value Display**

Note: Samples include their own embedded spreadsheet data. Opening a sample will overwrite any data already in the embedded spreadsheet.

To view sample Xcelsius 2008 visualizations

1. On the **File** menu, click **Samples**.

   The Samples dialog box appears.
2. In the **Category** box, click **User Guide Samples**.
3. In the **Items** box, click the component that you want to view an example of.

   A description of the component and a preview of the visualization are shown.
4. Click **OK** to open the sample visualization.

Using Templates

Xcelsius 2008 offers a set of templates you can use to create a new visualization. You can use the existing Xcelsius 2008 templates or you can create a visualization from scratch and save it as a template.

For more information on creating and using templates, see *Creating templates* on page 151.

To View Xcelsius 2008 Templates

1. On the **File** menu, click **Templates**.
   The New From Template dialog box appears.
2. In the **Category** box, click **New**.
3. In the **Items** box, click the Template you would like to view.
   A description and preview of the Template is shown.
4. Click **OK** to open the Template.

Creating and Updating Xcelsius 2008 Visualizations

chapter 5

This section introduces the process of creating and updating Xcelsius 2008 visualizations.

Creating a visualization

1. Add or import spreadsheet data to an Xcelsius 2008 file.
2. Link components to the spreadsheet.
3. Preview and publish the visualization.

Step 1: Add Spreadsheet Data

The first step in creating an Xcelsius 2008 visualization is to add spreadsheet data to support your visualization. There are three ways to do this:

- Import a spreadsheet from Excel
- Copy/paste cells from an Excel file or Xcelsius 2008 embedded spreadsheet
- Manually enter information into the embedded spreadsheet

You can add, modify, and delete data in the embedded spreadsheet. If you have linked cells to components, the components will automatically update when you change the data in linked cells.

Step 2: Link components to the spreadsheet

The second step in creating an Xcelsius 2008 visualization is to select the data sources linked to the components. In this step, you assign one or more cells from your embedded spreadsheet to one or more Xcelsius 2008 components.

User Guide Sample: Slider

This model uses a Column Chart to show “Car Sales by Location” and a Horizontal Slider to create a simple "what-if" scenario that shows the impact of selling "N" number of additional cars. Adjusting the slider will cause the sales to increase or decrease, which is visualized in the column chart.

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the below step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats or components may have been added to enhance the appearance of the sample visualization.

Note: The completed sample XLF file with embedded spreadsheet data, and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

Selecting the data source for the components

1. Place a Column Chart on the canvas.
2. Double-click the Column Chart to open the Properties panel.
3. Click the **Data by Range** cell selector button.
4. Select the range of cells that contain the data for the Column Chart from the spreadsheet and click **OK** .
5. Type or link the chart title and subtitle.
6. Type or link the axis names.
7. Click the Horizontal Slider component to open the Properties panel.
8. Click the Data cell selector button.
9. Select the Price Per Unit value cell from the spreadsheet, and click **OK**.

Step 3: Preview and publish the visualization

The third step is to preview and publish the visualization. You can Preview the live visualization, test the simulation results, and generate the Flash animation SWF that contains the visualization. The visualization is then ready for publishing and distribution.

Click the Preview button  on the tool bar to toggle between the design view and Preview. In Preview, you can interact with the visualization as you would when it is published.

Once you are satisfied with the results, the visualization is ready to be published. You can publish your visualization using one of the following methods:

- Export as Adobe Flash (SWF)

  Note: This option is available only in Xcelsius Engage 2008 only.

- Export as HTML

  Note: This option is available only in Xcelsius Engage 2008 only.

-  Export to Microsoft PowerPoint
-  Export as Adobe PDF
-  Email Using Microsoft Outlook
-  Export to Microsoft Word
-  Export to BusinessObjects Platform

  Note: This option is available in BusinessObjects Xcelsius Enterprise 2008 only.

See *Exporting Xcelsius 2008 Visualizations* on page 133 for more information.

Updating data for a visualization

The Export Settings command on the File menu lets you specify how you want to update data. You can update the embedded spreadsheet as needed or you can specify an external Excel file to use as a data source. The following options for updating the data in your visualization are available:

- Use Current Excel Data

  This option takes the data as it exists in the embedded spreadsheet. This is the default option.

- Use Another Excel File

This option lets you specify a different Excel file from which to take data when the file is exported.

Updating the Embedded Spreadsheet

The easiest way to update your data is to make your changes directly in the embedded spreadsheet. Change the data in the embedded spreadsheet the same way you would with an Excel spreadsheet.

You can copy and paste cells from an Excel spreadsheet. Formulas and values will be pasted into Xcelsius 2008, however conditional formatting will not be retained.

Note: Xcelsius 2008 opens an instance of Excel that runs in the background. Although you can open a second instance of Excel, you will not be able to copy formulas between the instances. If you need to use Excel and Xcelsius 2008 files simultaneously, first open Xcelsius 2008, then open your Excel files by navigating to them using Windows Explorer and double-clicking on them.

If you need to keep synced Excel and Xcelsius 2008 files, we recommend making your updates in the Xcelsius 2008 embedded spreadsheet and then exporting the data to an Excel spreadsheet.

Note: Xcelsius 2008 imports Excel files by copying the spreadsheet data and inserting the data into the Xcelsius 2008 embedded spreadsheet. After the data has been imported, it is no longer linked to the original Excel spreadsheet. Any changes you make to the source file will not appear in the Embedded Spreadsheet, nor will any changes to the Xcelsius 2008 file appear in the original Excel file.

Using Xcelsius 2008 Components

chapter 6

Overview

This section introduces the Xcelsius 2008 components and their most basic functionality.

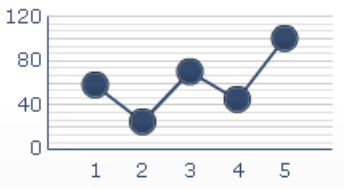
Using the Chart components

Charts are one of the most powerful ways to transmit your message. A well-created chart can transmit a real sense of value to any report. This section describes the basic functionality available in charts.

For more information about chart components, see *Chart Components Reference* on page 247.

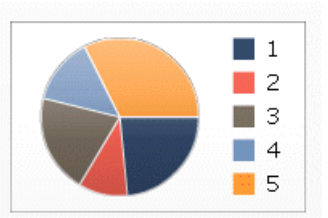
Xcelsius 2008 provides the following charts:

- Line Chart



A single- or multi-line chart ideal for showing tendency over a period of time. Use this chart in visualizations that emphasize a trend or a continuing sequence of data, such as Stock Prices or Revenue History.

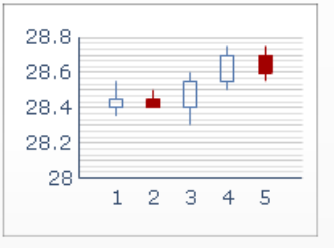
- Pie Chart



A chart that represents the distribution or participation of each item (represented by a slice) of a certain total that is represented on the overall pie value. The pie chart is appropriate for visualizations such as Revenue

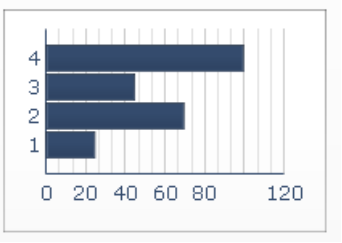
Contribution by Product. In that example, the overall pie size would represent the total revenue, and each slice would represent a different product.

- OHLC Chart and Candlestick Chart



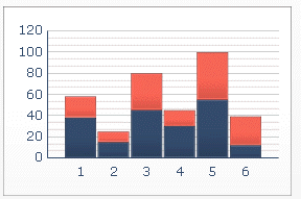
The open-high-low-close and candlestick charts are primarily used to display stock data. Each marker corresponds to the values, which are represented as lines attached to the marker on the OHLC chart and as colors on the candlestick chart. Open displays the opening price of the stock. High displays the highest price the stock achieved on that day. Low displays the lowest price the of the stock on that day. Close displays the closing price of the stock.

- Bar Chart and Column Chart



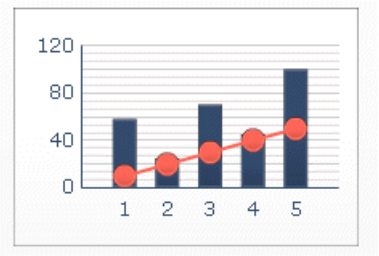
A single- or multi-bar chart that shows and compares one or more items over a period of time or in a specific range of values. You could, for example, use a column chart in visualizations that contain the quarterly headcount by region.

- Stacked Column Chart and Stacked Bar Chart



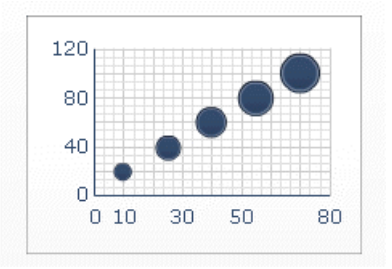
A chart that compares several variables over a period of time. Stacked bars compare one or more variables, with each series adding to the total value. This chart compares several variables over a period of time, for example: Marketing Cost and Administrative Cost. Each one of the cost components is presented in a different color and each bar represents a different time period. The total bar size represents the Total Cost.

- Combination Chart



A combination column and line chart ideal for displaying a range of values and a trend line for those values. You can use the combination chart in visualizations examining stocks. A line series might show the historical stock price over the year, and a column chart might show the volume of trading for that stock.

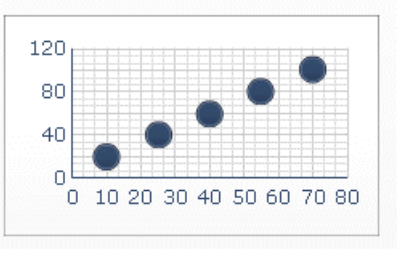
- Bubble Chart



The bubble chart is one of the most powerful analytic tools available. It lets you compare a group or series of items based on three different parameters. It has an X-axis and Y-axis to represent the item location over the chart area, and a Z value to represent the item size.

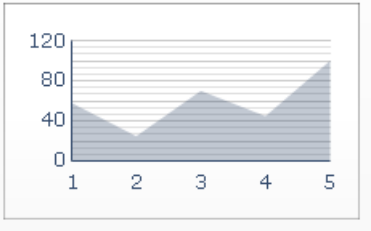
You could, for example, use this chart to represent the market composition with the X-axis representing the ROI by industry type, the Y-axis representing the Cash Flow, and the Z-axis representing the Market Value.

- XY Chart



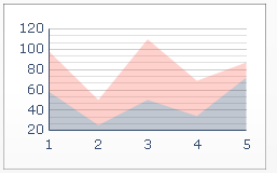
A chart that displays data that encompasses two dimensions. The XY chart shows each data point as a result of the intersection of X values and Y values. You can, for example, use the XY chart in visualizations that compare ROI (on the X axis) against Market Value (on the Y axis) for a group of companies.

- Area Chart



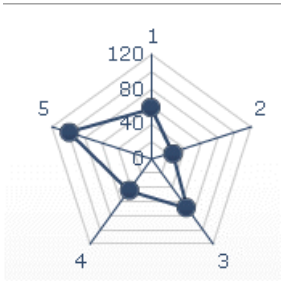
A standard chart with vertical and horizontal axes. Each point along the horizontal axis represents a data point. The actual values for each data point are plotted against the vertical axis. For each series, colored areas are created by connecting the plotted points against the horizontal axis. Use this chart in visualizations that emphasize a trend line, such as Stock Prices or Revenue History.

- Stacked Area Chart



A standard chart with vertical and horizontal axes. Each point along the horizontal axis represents a data point. The actual values for the data points are plotted against the vertical axis, with each series adding to the total value. You could use the stacked area chart to compare the revenue for multiple products as well as the combined revenue of all the products and the contribution of each product to the combined revenue.

- Radar Chart and Filled Radar Chart



A chart with axes that radiate outwards from the center of the chart. These charts can have several axes. They are useful for plotting multi-dimensional sets of data. In the filled radar chart, the shape created by connecting the points along each axis is filled in with color. You could use the radar charts to compare aspects of stocks. One axis could display the price, another the volume, another the Price to Earnings ratio, and any other relevant data.

- Tree Map



A chart that displays hierarchical data in a small area. Each data point is represented by a rectangle. In Xcelsius 2008, the tree maps display two parameters, represented by size and color intensity. Tree maps can be used to compare two sets of data.

For example, a tree map could be used to represent the size and interest rate of loans. You can set the size of the rectangle as the loan amount; a large loan would be repesented by a larger rectangle. The color of the rectangle would represent the interest rate; a higher interest rate would be represented by a brighter color value.

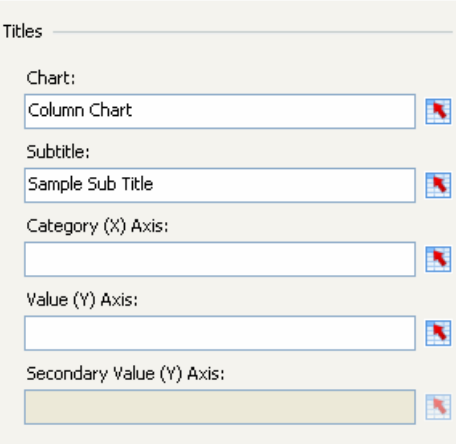
How to configure a chart

Configuring a chart in Xcelsius 2008 is similar to creating a chart in Excel. The minimum requirement is to have a list of values in a range of cells. After this, you can enhance your chart with some basic information such as Title, Subtitle, Axis Titles and Series Names.

Example: Creating a visualization with a chart

For this example, you will need an Excel file that contains an adjacent range of cells.

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Place a column chart on the canvas.
3. Double-click the column chart component to open the Properties panel.
   Here you can select the data sources and modify the chart's appearance.



4. Type the title of the chart in the **Chart** box.

   Tip: You can also click the Chart cell selector button to select the chart title from the spreadsheet.

5. Type the subtitle of the chart in the **Subtitle** box.

   Tip: You can also click the Subtitle cell selector button to select the chart subtitle from the spreadsheet.

6. Type the axis name in the **Category (X) Axis** box.

   Tip: You can also click the Category (X) Axis cell selector button to select the axis name from the spreadsheet.

7. Type the axis name in the **Value (Y) Axis** box.

Tip: You can also click the Value (Y) Axis cell selector button to select the axis name from the spreadsheet.

8. (Optional) Type the axis name in the **Secondary Value (Y) Axis** box.

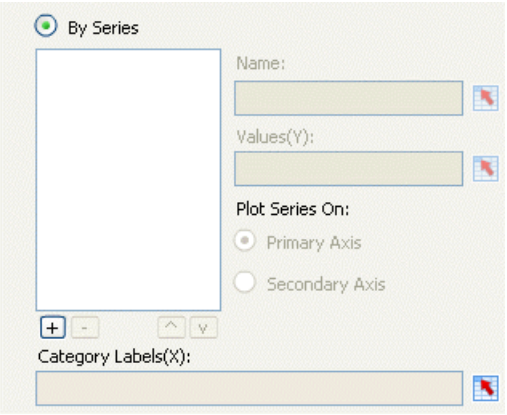
   Tip: You can also click the Secondary Value (X) Axis cell selector button to select the axis name from the spreadsheet.

9. Click the **Data by Range** cell selector button and select the range of values from the spreadsheet.

   The data range is the list of values to be presented on the chart component. Select the full range of values you want to display in the chart.

10. Select a radio button to indicate how your data is arranged: **Data in Rows** or **Data in Columns.**

In some cases, you may want to create a multi-series chart. To do this, select the By Series option and select one or more series. Each series is represented by columns of the same color.



Once you have created your basic chart, you can enhance and customize it. Refer to *Chart Components Reference* on page 247 for more information.

User Guide Sample: Drill-Down Chart

This sample provides an example of the Drill Down capability that allows charts to behave as selectors. This visualization displays a Pie Chart that contains yearly sales for several branches. When a user clicks on a slice of

the Pie Chart, the monthly sales for that branch are displayed in a Column Chart.

To open the User Guide Sample file:

1. Select **File > Samples**
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats or components may have been added to enhance the appearance of the sample visualization.

Note: The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.

   For this example the spreadsheet should contain monthly sales data for different branches.
2. Place a Pie Chart component on the canvas.
3. Place a Column Chart component on the canvas below the Pie Chart component.
4. Double-click the Pie Chart component to open the Properties panel.
5. Click the **Values** cell selector button and select the data range from the spreadsheet.

   For this example, select the cells that contain the Sales Totals for the individual branches.
6. Click the **Data in Columns** radio button to indicate that the data is organized in a column.
7. On the **Drill Down** tab, click **Enable Drill-Down**.

   The Drill Down settings can now be configured.
8. On the **Insertion Type** list, click **Rows**.

This will let you insert a row of data into the Destination range.

9. Click the **Source Data** cell selector button and select the source data from the spreadsheet.

   For this example, the range of cells should contain the columns of monthly sales data from January to December and the names of the branches.

10. Click the **Destination** cell selector button and select a range of cells from an empty row of the spreadsheet.

    This is the range of cells where the row of data (Branch name and sales Jan-Dec) will be inserted.

    Note: The cells must be empty or the drill down functionality will be compromised.

11. Click the Column Chart component to open the Properties panel.
12. Click the **Chart** cell selector button and select the first cell of the Destination range selected for the Pie Chart.
13. Click **Data by Series**; click the plus button to add a series to the list box.
14. Click the **Values (Y)** cell selector button and starting with the first cell to the left of the cell selected in Step 12, select the remainder of the range of empty cells you selected for the Destination range.
15. Click the **Category Labels (X)** cell selector button to select the cells in the spreadsheet that contain the column headers, for this sample the months of the year.
16. Click the **Preview** button to view the interaction between the Pie Chart and Column Chart components.

    As you click on slices of the Pie Chart, the column chart will update to show the monthly sales data for the selected branch.

User Guide Sample: Dual Axis Charts

Xcelsius 2008 now has the ability to plot series data on both a primary and a secondary axis. This is available for the following charts: Line, Bar, Stacked Bar, Column, Stacked Column, Area, Stacked Area, and Combination Chart.

To open the User Guide Sample file:

1. Select **File > Samples**
2. Select the User Guide Samples category.

3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats or components may have been added to enhance the appearance of the sample visualization.

Note: The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use
2. Place a Combination Chart component on the canvas. .
3. Double-click the Combination Chart to open the Properties panel.
4. In the **Chart** box, type "Stock Price vs. Volume".
5. In the **Category (X) Axis** box, type "Week Ending".
6. In the **Value (Y) Axis** box, type "Price".
7. Click **Data by Series**; click the plus button to add a series to the list box.
8. In the **Name** box, type "Closing Price".
9. Click the **Values (Y)** cell selector button and select the Source Data for this series; for this sample, select the data under the column header "Closing Price".
10. Under Plot Series On, click the **Primary Axis** radio button.
11. Click the plus button to add another series to the list box.
12. In the **Name** box, type "Volume".
13. Click the **Values (Y)** cell selector button and select the Source Data for this series; for this sample, select the data under the column header "Volume".
14. Under Plot Series On, click the **Secondary Axis** radio button.
15. Click the **Category Labels (X)** cell selector button and select the data labels; for this sample select the data under the column header "Date".
16. Click the Appearance tab; click the Series sub-tab.
17. For the series "Closing Price", click the **Type** dropdown menu and select **Column**.
18. For the series "Volume", click the **Type** dropdown menu and select **Line**.

19. Click **Preview** to view the Combination Chart component displaying two series plotted on separate axis.

In this sample, the Combination Chart component has been configured to display two disparate sets of data, each plotted on its own axis.

Using the Container components

This category contains a group of components that group and display other components.

Note: These components are not available in Xcelsius Present.

For more information about Container components, see *Container Components Reference* on page 269.

- Panel Container



The Panel Container components act as smaller canvases within the main canvas and hold one or more components. Components in the Panel Container can be moved, added, changed or deleted. Click the plus sign next to the Panel Container in the Object Browser to expand the list of components within the Panel Container.

- Tab Set



The Tab Set component is similar to the Panel Container components. The Tab Set acts as a smaller canvas within the main canvas. A Tab Set contains multiple tab views; each can be displayed on the canvas by clicking its corresponding tab. Tabs can be added or deleted from the

Tab Set by clicking on the gray plus and minus buttons displayed on the top left corner. These buttons do not display when the visualization is run.

User Guide Sample: Panel Container

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats or components may have been added to enhance the appearance of the sample visualization.

Note: The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Place a Panel Container on the canvas
3. Click the Panel Container, displaying the black sizing boxes. Increase the size of the Panel Container by dragging the bottom corner sizing box.
4. In the Components browser, select a Pie Chart component; drag the pointer and release in the interior of the Panel Container. The Pie Chart will now be inside the Panel Container.
5. In the Components browser, select a Label component; drag the pointer and release in the interior of the Panel Container. The Label will now be inside the Panel Container.
6. In the Objects Browser, click the plus sign to expand the Panel Container tree. The Pie Chart and Label will be displayed as sub-components of the Panel Container.

7. Select the Label, click Enter Text. Type or paste any block of text into the box.
8. Click the Panel Container, displaying the black sizing boxes. Decrease the size of the Panel Container so that only the Pie Chart is visible by dragging the bottom corner sizing box.
9. Click Preview to view how the Panel Container displays components.

In this sample, the Panel Container has been sized smaller than its contents. The Panel Container automatically adds horizontal and/or vertical scroll bars as needed. If more components were added to the canvas of the visualization, dynamic visibility functionality could be used to show or hide the entire Panel Container and its contents, rather than applying the functionality to each component individually.

User Guide Sample: Tab Set

The Tab Set component is similar to the Panel Container component. The Tab Set acts as one or more smaller canvases within the main canvas. A Tab Set contains multiple views organized in tabs; each view can be displayed by clicking its corresponding tab. Each view can hold one or more components and works similar to the Group function during design of the visualization. Components in the Tab Set can be moved, added, changed or deleted. In the Object Browser, click the plus sign next to expand the Tab Set; each tab view is represented as a Canvas which can also be expanded to list the components it contains.

The number of tab views displayed by the Tab Set can be increased or decreased by clicking a tab label. Gray plus and minus buttons will display above the first tab. Clicking the plus button will open an Insert dialog box, which prompts you to enter a Label for the new tab.

Note: The plus and minus buttons do not display when the visualization is run.

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open

the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Place a Tab Set component on the canvas.
3. Double-click the interior of the Tab Set (canvas) to open the Properties panel.
4. In the Label box, type "North America".
5. In the Components browser, select a Pie Chart component; drag the pointer and release in the interior of the Tab Set. The Pie Chart will now be inside the Tab Set.
6. Click the tab label; click the plus button to add a new tab.
7. At the prompt, enter "Latin America" for the tab Label; click OK to add the new tab.
8. In the Components browser, select a Line Chart component; drag the pointer and release in the interior of the Tab Set. The Line Chart will now be inside the Tab Set.
9. Click the tab label; click the plus button to add a new tab.
10. At the prompt, enter "Europe" for the tab Label; click OK to add the new tab.
11. In the Components browser, select a Column Chart component; drag the pointer and release in the interior of the Tab Set. The Column Chart will now be inside the Tab Set.
12. Click the tab label; click the plus button to add a new tab.
13. At the prompt, enter "Asia" for the tab Label; click OK to add the new tab.
14. In the Components browser, select a Bar Chart component; drag the pointer and release in the interior of the Tab Set. The Bar Chart will now be inside the Tab Set.
15. Click the tab label; click the plus button to add a new tab.
16. At the prompt, enter "Australia & Pacific" for the tab Label; click OK to add the new tab.

17. In the Components browser, select a Pie Chart component; drag the pointer and release in the interior of the Tab Set. The Pie Chart will now be inside the Tab Set.
18. Optional: Using the Objects Browser, navigate to the chart in each tab and bind it to the spreadsheet data. For step-by-step chart configuration instructions see User Guide Sample: Status List, for this sample exclude configuration of the Status and Key for each chart.
19. Click Preview to view how the Tab Set displays components.

In this sample, the Tab Set has been configured to display five different views, each with a unique component (and data set if configured). Click on the tabs to navigate between the views.

Using the Selector components

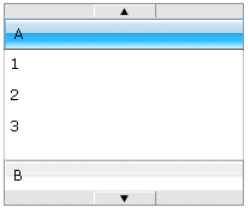
The functionality of selector components lets you create a visualization with multiple selections.

Note: The Information button that appears on the Properties panel of each selector component displays an animation that describes the functionality of the selector component.

For more information about Selector components, see *Overview* on page 278.

Each selector can be combined with other components to create a dynamic visualization:

- Accordion Menu



The Accordion Menu is a two-level menu that lets users first select a category and then select from items within that particular category.

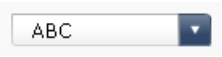
Note: This component is not available in Xcelsius Present.

- Check Box



A standard user-interface component where users toggle between two states: checked and unchecked.

- Combo Box



A standard user-interface component that drops down a vertical list of items when it is clicked. Users can then select an item from the list.

- Filter



The Filter component looks at a range of cells with multiple fields of data and categorizes them by unique data entries. The Filter sifts through the data range and inserts data corresponding to the drop down selections.

- Fisheye Picture Menu



With the Fisheye Picture Menu, users select from a set of pictures or icons. As the mouse is moved over each item in the menu, the item is magnified. The closer the mouse is to the center of the item, the more the item is magnified. This creates an effect similar to that of a fish-eye lens.

- Sliding Picture Menu



With the Sliding Picture Menu, users select from a set of icons or pictures. The users can use arrows to scroll through the icons or the menu can be configured to scroll through the icons as the user moves the mouse.

Note: This component is not available in Xcelsius Present.

- Icon



The Icon can be used as a selector or display component. As a selector, it functions similar to the Check Box component. It can represent the actual value contained in one cell and be compared to its target value in another cell.

The Icon can also be set to change color depending on its value relative to the target value, which is an Alert. See *Alerts* on page 148 for more information. At the same time, you can use the Icon to activate and display other components. See *Dynamic Visibility functionality* on page 142 for more information.

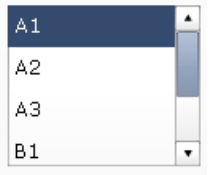
Note: To configure the Icon as a display-only component, click the Appearance tab and uncheck Show On/Off . The Icon will not be selectable

- Label Based Menu



The Label Based Menu lets users select items from a vertical or horizontal grouping of buttons.

- List Box



A standard user-interface component that lets users select items from a vertical list.

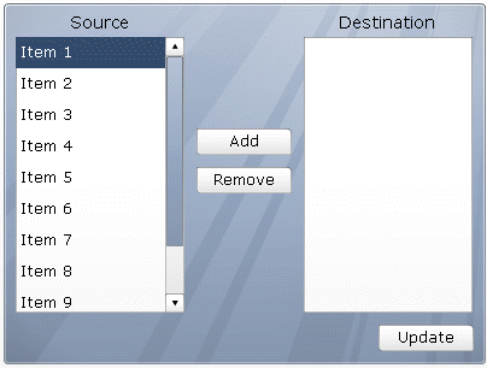
- List View

Name	Q1	Q2	Total
Company 1	1000	2000	3000
Company 2	1200	2200	3400
Company 3	1400	2400	3800
Company 4	1600	2600	4200
Company 5	1800	2800	4600

Note: This component is not available in Xcelsius Present.

The List View component has the same functionality as the table component, but lets the user sort the columns and adjust the width of the columns in the exported SWF file.

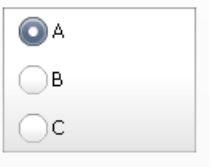
- List Builder



The List Builder provides a way for end-users to build their own set of data. This data set can then be used to populate another component.

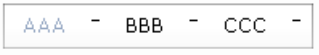
Note: This component is not available in Xcelsius Present.

- Radio Button



The Radio Button component lets users select from a vertical or horizontal group of selections.

- Ticker



The Ticker component displays horizontally scrolling text in your visualization. Scrolling stops when the user hovers the mouse over the labels.

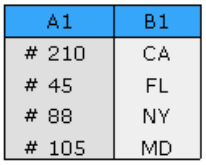
Note: This component is not available in Xcelsius Present.

- Toggle Button



A standard user-interface component that lets users toggle between two states: on and off.

- Spreadsheet Table



The Spreadsheet Table component is a What You See Is What You Get representation of any group of cells from your spreadsheet.

Note: The Spreadsheet Table component can be used as a display component as well as a selector component. As a display component, the Spreadsheet Table is a graphic representation of a range of cells in the spreadsheet. To use the Spreadsheet Table as a display component, click the Display Data cell selector button and select a range of cells to display from the spreadsheet. Under the Behavior tab, click **Deselect All**. The rows of the table will not be selectable. To use the spreadsheet table as a selector component, after setting the Display Data range, set the Insert Option to rows.

- Play Selector



The Play Selector sequentially inserts one row or column from a defined range into the Destination cells you selected. You can link the Destination cells to a chart so that the chart data changes each time the play selector inserts a new row or column. The Play Selector component can display a large amount of data with a movie effect which lets users view the data without clicking on each selection.

Note: This component is not available in Xcelsius Present.

User Guide Sample: Filter

The Filter component takes a range of data with fields that contain duplicate data entries and filters each field into a Combo Box so that there are only unique entries in each field. The Filter component can present a large amount of data and can be used to create a selector with up to ten Combo Box fields. When selections are made on the Filter component, the corresponding data is inserted in the spreadsheet and can be used as source data for a chart component.

In this sample, the quarterly Sales data is displayed. The data is organized by Product, Sales Rep, and Account Type. Selecting an item from any of the Combo Boxes will show the quarterly Sales data for the corresponding combination of selections on the Bar Chart.

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Place a filter component on the canvas.
3. Double-click the filter component to open the Properties panel.
4. Click the **Source Data** cell selector button and select all the data to be included in the visualization.

For this sample, the data selection should include the fields used by the filter as well as the corresponding data that will be displayed in the chart.

5. Click the **Destination** cell selector button and select an empty range of cells in a row. The range must be large enough to display a full row of chart data.

   For this sample, select the range of cells adjacent to "Filter Destination".

   Note: The cells must be empty or the inserted data may not function properly.

6. Adjust the value in the **Number of Filters** box.

   For this sample, set the number of filters to three: Product, Sales Rep, and Account Type.

7. Click the **Title** cell selector button and select the labels that will appear above each Combo Box.

   For this sample, select the column headers of the fields to be filtered.

8. Place a Bar Chart component on the canvas.
9. Click **Data by Series**; click the plus button to add a series to the list box.
10. Click the **Values (X)** cell selector button and select the range of empty cells you selected for the Destination range for the Filter component.
11. Click the **Category Labels (Y)** cell selector button to select the cells in the spreadsheet that contain the chart data column headers; for this sample the quarters of the year.
12. Click the **Preview** button to view the interaction between the Filter and Bar Chart components.

The quarterly Sales data displayed in the Bar Chart will update depending on the selections made in the Combo Boxes of the Filter Component.

User Guide Sample: List Builder

The List Builder provides a way for users to build their own sets of data. The List Builder consists of a Source list containing all possible selections, a Destination list containing the user's selections, and an Update button. Users can move items between the Source and Destination lists in a number of ways:

- Double-clicking items in either the Source or Destination list to move the item to the other list.
- Dragging items from one list to another.
- Using the Add and Remove buttons.

When the Update button is pressed, the items in the Destination List are inserted into the Destination range to be displayed by another component. To change the order of selections in the Destination List, drag an item up or down in the list.

In this sample, the user selects from a list of branches to see the yearly sales data for those branches. The user builds a list of branches and then clicks the Update button to see the selected data in a Column Chart.

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Place a List Builder component on the canvas.
3. Place a Line Chart component on the canvas below the List Builder component.
4. Double-click the List Builder component to open the Properties panel.
5. Click the Labels cell selector button and select the Source List items from the spreadsheet.

   For this sample, select the list of branches.

6. On the Insertion Type list, click Row.

   This inserts a row of data corresponding to each item that is placed in the Destination List.

7. Click the Source Data cell selector button and select the range of data from the spreadsheet.

   For this sample, the range of cells should contain the table of yearly sales data for the branches.

8. Click the Destination cell selector button and select a range of empty cells.

   For the List Builder, the Destination range must be the same size as the Source Data range you selected in the last step.

   Note: The cells must be empty or the List Builder may not function properly.

9. Click the Column Chart component to open its Properties panel.
10. Click **Data by Series**; click the plus button to add a series to the list box.
11. Click the **Values (Y)** cell selector button and select the range of empty cells you selected for the Destination range for the List Builder component.
12. Click the **Category Labels (X)** cell selector button to select the cells in the spreadsheet that contain the chart data column headers, for this sample the fiscal years.
13. On the Behavior tab, in the Ignore Blank Cells area, click In Series and In Values.

    Note: This ensures that the Column Chart only displays data for the items that were selected in the Destination List of the List Builder.

14. Click the Preview button to view the interaction between the List Builder and Column Chart components.

    Move some of the branches from the Source List to the Destination List. Click the Update button. The Column Chart will update to show the yearly sales data for the selected Branches.

User Guide Sample: Accordion Menu

The Accordion Menu component is a two-level menu that displays Categories, and when clicked on the Categories expand to display a list of items to select from. For this sample, the Accordion Menu displays Regions that when clicked on show the names of Sales Reps; selecting a Sales Rep displays their sales data for the year.

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Place an Accordion Menu component on the canvas.
3. Place a Column Chart component on the canvas.
4. Double-click the Accordion Menu component to open the Properties panel.
5. Select Category 1 in the list box; click the Name cell selector button and select the first Category name.

   In this sample, select the first region name.
6. Click the **Labels** cell selector button and select the items to be listed under the first category.

   For this sample, each region is a Category and the Labels for each region are the names of the corresponding sales representatives.

7. Click the **Source Data** cell selector button and select the data corresponding to the Labels in the first Category.

   For this sample, the range of cells should contain the sales data for the sales representatives in the first region.

8. Repeat steps 5-7 for each Category. In this sample, repeat the steps for each region in the spreadsheet.
9. Click the Insertion Type dropdown menu, then select Row.
10. Click the **Destination** cell selector button and select an empty row of cells.
11. Click the Column Chart component to open its Properties panel.
12. Click **Data by Series**; click the plus button to add a series to the list box.
13. Click the **Values(Y)** cell selector button and select the range of empty cells you selected for the Destination range for the Accordion Menu component.

    Note: Do not include the first cell of the Destination range; this is where the Sales Rep's name will be inserted. The Values (Y) range should only include the cells that will contain sales data.

14. Click the **Category Labels(X)** cell selector button to select the cells in the spreadsheet that contain the chart data column headers, for this sample the months of the year.
15. Click the **Chart** cell selector button and select the first cell in the Destination range selected for the Accordion Menu.

    This cell will contain the name of the sales representative and will now be displayed as the Column Chart title.

16. Click the Preview button to view the interaction between the Accordion Menu and Column Chart components.

    As you click on a region and select a sales representative, the chart will display the monthly sales data for that sales representative.

User Guide Sample: Sliding Picture Menu

The Sliding Picture Menu component displays thumbnail images that when selected insert data corresponding to the images that can be displayed by another component. In this sample, the Sliding Picture Menu displays

thumbnail images of a company's products, clicking on a product image displays sales data for that product in a Column Chart.

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Place a Sliding Picture Menu component on the canvas.
3. Place a Column Chart on the canvas beneath the Sliding Picture Menu component.
4. Double-click the sliding picture menu component to open the Properties panel.
5. Click the Labels cell selector button and select the data to be displayed as the image labels.

   For this sample, select the names of the products.
6. Click the Embedded radio button, then click the Import button.

   The Import Thumbnail dialog box appears.
7. Select the **Click to Add Images** button. Navigate to the first thumbnail image and click **OK**. For this sample, image files have been provided in the User Guide Samples file directory.
8. Repeat Step 7 until all images to be used have been added to the Import Thumbnail dialog box.
9. On the Insertion Type list, select Row.

10. Click the Source Data cell selector button and select the range of cells containing the source data.

    For this sample, the range of cells should contain the yearly sales data for the products.

11. Click the Destination cell selector button and select an empty row of cells.
12. Click the Column Chart component to open its Properties panel.
13. Click **Data by Series**; click the plus button to add a series to the list box.
14. Click the **Values(Y)** cell selector button and select the range of empty cells you selected for the Destination range for the Sliding Picture Menu component.

    Note: Do not include the first cell of the Destination range; this is where the product name will be inserted. The Values(Y) range should only include the cells that will contain sales data.

15. Click the **Category Labels(X)** cell selector button to select the cells in the spreadsheet that contain the chart data column headers, for this sample the fiscal years.
16. Click the **Chart** cell selector button and select the first cell in the Destination range selected for the Accordion Menu.

    This cell will contain the name of the product and will now be displayed as the Column Chart title.

17. Click the Preview button to view the interaction between the Sliding Picture Menu and Column Chart components.

    As you click on the images in the Sliding Picture Menu, the Column Chart displays the yearly sales data for that product.

User Guide Sample: Dynamic Selected Item

The Dynamic Selected Item functionality is available in list-based selectors. The selector labels can be changed dynamically through another component in the visualization.

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Place a List Box component on the canvas.
3. Double-click the List Box to open the Properties panel.
4. Click the **Labels** cell selector button and select the labels for the selections in the List Box.
5. From the **Insertion Type** dropdown menu, select Rows.
6. Click the **Source Data** cell selector button and select the data corresponding to the Labels.
7. Click the **Destination** cell selector button and select a range of empty cells.
8. Click the Behavior tab; in the Selected Item section, click the Item cell selector box and select a cell in the spreadsheet.
9. Place a Column Chart component on the canvas.
10. Click the Column Chart to open its Properties panel.
11. Click **Data by Series**; click the plus button to add a series to the list box.
12. Click the **Values (Y)** cell selector button and select the same range of cells as the Source Data for the List Box component.
13. Click the **Category Labels (X)** cell selector button and select the column headers of the Source Data range.
14. Place a Radio Button component on the canvas.
15. Click the Radio Button to open its Properties panel.
16. Click the **Labels** cell selector button and select the labels for the Radio Button selections.
17. From the Insertion Type dropdown menu, select Label.
18. Click the Destination cell selector button and select the same cell selected in step 8 as the Selected Item for the List Box.

19. Click **Preview** to view the interaction between the List Box, Radio Button, and Column Chart components.

In this sample, the Radio Button selection affects the labels that are displayed in the List Box. The List Box selection then updates the Column Chart display data.

User Guide Sample: Filtered Rows

The Filtered Rows functionality is one of the methods available to configure a selector component. The selector is with a range of data organized in rows. Within that range of data there are labels that will be displayed on the selector component. These labels may be duplicated and associated with more than one data point or row of data. With Filtered Rows, the selector filters the range of labels into unique data entries. When the label is selected on the selector component, only the rows that correspond with that label are inserted in the Destination range.

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Place a Radio Button component on the canvas.
3. Double-click the Radio Button to open the Properties panel.

4. Click the **Labels** cell selector button and select the labels for the radio buttons; for this sample select all of the data under column header "Item".
5. On the **Insertion Type** dropdown menu, select Filtered Rows.
6. Click the **Source Data** cell selector button and select the data corresponding to the Labels.

   For this sample select the all of the data under column headers "Date of Purchase", "Quantity" and "Item".

7. Click the **Destination** cell selector button and select a range of empty cells.

   For this sample, select a range of cells large enough to contain all of the Source Data.

8. Place a Column Chart component on the canvas.
9. Click the Column Chart to open its Properties panel.
10. In the **Chart** box, type "Purchases by Date".
11. In the **Category (X) Axis** box, type "Date".
12. In the **Value (Y) Axis** box, type "Quantity".
13. Click **Data by Series**; click the plus button to add a series to the list box.
14. Click the **Values (Y)** cell selector button and select the range of cells where the data will be inserted; for this sample select the range where the column "Quantity" will be inserted.
15. Click the **Category Labels (X)** cell selector button and select the range of cells where the labels will be inserted; for this sample select the range where the column "Date of Purchase" will be inserted.
16. Click **Preview** to view the interaction between the Radio Button and Column Chart components.

In this sample, the Radio Button uses the Filtered Rows functionality and takes a range of data with duplicate data entries and filters the data so that there are only unique entries. Based on the user's selection, the Radio Button locates all data points that correspond to the selected label. The data is then inserted in a range of cells to be displayed in the Column Chart.

User Guide Sample: Tree Map

The Tree Map uses two parameters to create a color block for each Product. The size of each color block represents its Price relative to all other prices. The light or dark shade of each block represents is Market Share relative to

the rest of the market. This graphic representation allows instant comparison of multiple data points against each other in two parameters. If a data point lies far outside the range of the data points it's being compared to, it might show up as significantly larger/smaller or very bright/dark.

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Place a Tree Map component on the canvas
3. Double-click the Tree Map component to open Properties panel.
4. Click **Data By Series**; click the plus button to add a series to the list box.
5. Click the **Display Labels** cell selector button and select the Labels for the items to be represented in the Tree Map.

   For this sample, select the product names.
6. Click the **Values (Size)** cell selector button and select the data that will determine the size of the blocks within the Tree Map.

   For this sample, select the price data.
7. Click the **Values (Color Intensity)** cell selector button and select the data that will determine the color intensity of the blocks within the Tree Map.

   For this sample, select the market share data.
8. Click **Preview** to view how the Tree Map displays data.

In this sample, if the user were looking for the weakest product in this group, Product A would stand out because it is light colored indicating small market share and is also the smallest block indicating a low price. Conversely, Product G is dark colored, indicating a large market share, and is also one of the largest blocks, which indicates a higher price; the dark color and large size make it stand out as a strong product.

Using the Single Value components

Single Value components let you add user interactivity to your visualizations. Single Value means that the components are linked to a single cell in the spreadsheet. When you run the visualization the component lets you modify or represent the value of that cell.

For more information about Single Value components, see *Single Value Components Reference* on page 301.

Input vs. output

Single Value components have been classified as both input and output components, which means that you can use any Single Value component as an input or output element in your visualization.

What dictates whether a Single Value component is an input (which permits user interaction) or output, is the cell to which it is linked. If the cell contains a formula of any type, the component is interpreted as an output. If the cell does not contain a formula, it is represented as an input.

For example, if you have a Gauge linked to a cell that does not contain a formula, you can modify the value by dragging the gauge needle, thereby modifying the cell value. If you have a Gauge linked to a cell that does contain a formula, you cannot modify the value.

Each component can be used to add interactivity to a visualization:

- Dial



An input component. A Dial represents a variable that can be modified to affect other components. For example, to represent the Price per Unit.

- Slider and Dual Slider



An input component. A Slider represents a variable that can be modified to affect other components. For example, to represent the Price per Unit. The Dual Slider allows you to adjust both the minimum and maximum values.

- Progress Bar



An output component. A Progress Bar represents a value that changes and fills the progress bar area depending on its value.

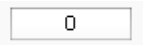
- Gauge



An output when bound to a cell containing a formula, or an input when bound to a cell containing a value.

As an output, a Gauge represents a value that changes and moves the needle. As an input, a Gauge represents a variable that can be modified to affect other components. Users can interact with the Gauge by dragging the needle to change the value.

- Value



An output when bound to a cell containing a formula, or an input when bound to a cell containing a value.

As an output, a Value represents a value that changes. As an input, a Value represents a variable that can be modified to affect other components. Users can interact with the Value by typing in a new value.

- Spinner



An input component. A Spinner represents a variable that can be modified to affect other components. Users can interact with the Spinner by clicking the up and down arrows or by typing a value into the component.

- Play Control



An input component. Play Control is used to automatically increase the value of a cell in your spreadsheet. For example, link the play button to a cell that contains the headcount. What will happen if the headcount increases by one, two, three, or more? Play Control takes the initial headcount value and increases its value automatically by increments.

User Guide Sample: Value Display

The Value component can be used to display or adjust the numeric value of cell. This visualization contains a Column Chart displaying revenues for five (5) different stores, adjusting the Value component will cause an increase or a decrease in the revenue on the Column Chart.

In this sample, a store supervisor wants to measure the effect that increasing or decreasing the price of a particular product has over the Revenue from products normally sold over a period of time.

- In this case, Price per Unit is the variable that we want to modify. This cell affects the revenues for all stores.

- Quantity sold is the normal volume of products sold over a period of time.
- Revenues are calculated as Quantity multiplied by Price per Unit..

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Place a Column Chart component on the canvas.
3. Double click the Column Chart to open the Properties panel.
4. Click **Data by Series**; click the plus button to add a series to the list box.
5. Click the **Values (Y)** cell selector and select the data under Revenues.
6. Click the **Category Labels (X)** cell selector and select the Store Names.
7. Place a Value component on the canvas.
8. Click the **Title** cell selector button and select the cell containing "Price per Unit".
9. Click the **Data** cell selector button and select the Price per Unit value cell from the spreadsheet.
10. Click the **Preview** button to view the interaction between the Value and Column Chart components.

You can increase or decrease the Price per Unit by clicking in the Value component and dragging the pointer up or down. Double-click the Value component to type in the Price per Unit. Because the Value component is linked to a cell that affects the Revenues, the chart dynamically changes when the Price per Unit changes to reflect the new revenues by store.

Using the Map components

Map components create visualizations with geographical representations that can display data by region.

The Map components have two major characteristics; they display data for each region and each region can also act as a Selector. By combining these two features, you can create a visualization where the data for each region appears when you pass the pointer over the region. At the same time, each region can insert a row of data that contains additional information. This row of data is displayed by other components, such as a chart or value components.

For more information about Map components, see *Map Components Reference* on page 313.

How does it work?

Xcelsius 2008 associates data with each region in the map by using region keys. Each region in the map has a default region key, and you can enter your own region keys. When a region on the map is selected, the component searches either the first column or first row of that range's key. The data in the row or column corresponding with the key will be associated with the region.

By default, the USA maps use postal abbreviations as region keys; the Europe map uses the ISO (or International Organization for Standardization) two-digit country codes as region keys. To use the map components with existing spreadsheets, you can edit the region keys associated with each region by clicking the Manual Edit button to type the new keys, or by clicking the **Region Key** cell selector button to select the row or column containing the new keysby editing the region names.

Note: In the spreadsheet you must enter the region keys and data in adjacent cells for both Display Data and Source Data.

Tip: Xcelsius 2008 provides a spreadsheet that lists the default region codes for each map component. The file is located in the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

User Guide Sample: Map

In this sample, the USA map acts as a selector. The Map will display Revenue data for the state when the pointer passes over or clicks on it. The historic Revenue data of the selected state will be displayed on the Column Chart.

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Place a Map component on the canvas, for this sample use the United States by State Continental component.
3. Click the **Region Keys** Manual Edit button to verify that each state is linked to the same state region key as in your spreadsheet.

   The U.S. by State Continental component has region keys for the 48 continental states plus Washington D.C. in alphabetical order. Before configuring the Map component, you must include the region keys for each state that is identified in your spreadsheet. For example, the default region key is AL for Alabama and CA for California. The Map identifies data in the cell adjacent to the region key "AL" as being the data for Alabama, and the region key "CA" as being adjacent to the data for California.

4. Click the**Display Data** cell selector button and select the cells containing the state region keys and their corresponding data that will be displayed on the Map, for this sample the most recent Revenue data.
5. Under **Insertion Type**, select **Row**.
6. Click the **Source Data** cell selector button and select the cells containing State Keys and the data to be displayed in the chart based on the user's selection, for this sample the historic revenue data.

   Note: The Display Data range and the Source Data range each must have region keys associated with the data points, thereby requiring two sets of data ranges depending on your data structure.

7. Click the **Destination** cell selector button and select an empty range of cells.

   Note: The range of cells must be empty and large enough to accommodate the region key and the historic revenue data for the state. The Map component will insert the data into the selected range of cells.

8. Place a Column Chart component on the canvas.
9. Click the **Chart** cell selector button and select the first cell of the Destination range selected for the Map component.
10. Click **Data by Series**; click the plus button to add a series to the list box.
11. Click the **Values(Y)** cell selector button and starting with the first cell to the left of the cell selected in Step 9, select the remainder of the range of empty cells you selected for the Destination range.
12. Click the **Category Labels (X)** cell selector button to select the cells in the spreadsheet that contain the column headers of the Source Data, for this sample the fiscal years.
13. Click the **Preview** button to view the interaction between the Map and Column Chart components.

The historic revenue data in the Column Chart updates according to the State selected by the user.

Using the Text components

This category contains components for placing labels and typing text into your visualization.

For more information about Text components, see *Text Components Reference* on page 329.

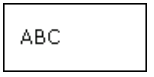
Text components let you customize your visualization:

- Input Text Area



The Input Text Area lets users input multiple lines of text into the visualization.

- Label



The Label component lets you add an unlimited amount of text to enhance your visualizations. You can use the Label component to create titles, subtitles, explanations, help, and more. Label text cannot be changed by the user.

- Input Text



The Input Text component lets users input text into the visualization.

Using the Other components

This category contains an assorted set of components that you can use to enhance your visualizations.

For more information about Other components, see *Other Components Reference* on page 353.

- Calendar



The Calendar component is a selector that lets you incorporate date selection into your visualizations.

Note: This component is not available in Xcelsius Present.

- Local Scenario Buttons



The Local Scenario Button lets users save and load runtime configurations of an Xcelsius 2008 visualization on their local machine. Once saved, these configurations or scenarios can be loaded again, even after closing the visualization. These scenarios are saved to the local machine, and will be unavailable if the visualization is opened on a different machine.

- Trend Icon



The Trend Icon changes its pointing direction, depending on the value of the cell to which it is linked:

  - If the value is positive, the arrow points up.
  - If the value is zero, the symbol is neutral.
  - If the value is negative, the arrow points down.

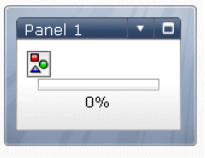
- History



The History component tracks and displays the history of changes in a selected cell. This allows you to easily see the effect of changes in worksheet data.

Note: This component is not available in Xcelsius Present.

- Panel Set



The Panel Set component is a series of framing options that enables you to easily navigate between files in a presentation. You can embed JPEG or SWF files into the frames of the Panel Set component and adjust a variety of formatting features to customize the look of the component in your visualization.

Note: This component is not available in Xcelsius Present.

- Source Data



The Source Data component has no visual interface. It allows you to push data into other cells simply by changing the value of the component's Selected Index.

Note: This component is not available in Xcelsius Present.

- Trend Analyzer



The Trend Analyzer combines data analysis and visualization. The component analyzes spreadsheet data and inserts data points for a trend line into the spreadsheet, which can then be added to your visualization.

Note: This component is not available in Xcelsius Present.

- Print Button



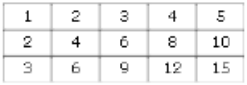
The Print Button allows the user to easily print the visualization while it is being run. The user can click the print button to print the SWF file. The print button is part of the canvas and will be visible in the printout.

- Reset Button



The Reset Button returns the visualization to its original state. Users can interact with the components, then click the button to clear their changes.

- Grid



1	2	3	4	5
2	4	6	8	10
3	6	9	12	15

The Grid component is a dynamic table that represents a group of rows and columns of content. The Grid lets you show the data just as it is on any table, or perform data modification that can impact other components.

The Grid component differs from the Spreadsheet and List View components in that rather than being a static representation of the data table, the user can click the cells of the Grid and type new values or drag the values higher/lower

Note: This component is not available in Xcelsius Present.

Using the Local scenario button component

The Local Scenario Button component lets users save the current state of a visualization, making it well-suited for saving results of what-if analyses. Users can save any number of these results or scenarios and load them at any time, even after closing the visualization.

The scenarios created are specific to each visualization. As such, two visualizations can have scenarios with the same names without interfering with one another.

The visualization can be moved or renamed on the same computer and will still be able to access its saved scenarios.

Scenarios saved in preview mode will not persist outside of the preview session. This includes snapshots and exporting to PowerPoint or to Outlook.

Note: Local scenarios created on one computer will not be accessible to the visualization if it has been emailed or moved to another computer.

How does the Local Scenario Button component work?

To enable users to save, load, and delete scenarios, add a Local Scenario Button component to the visualization.

When running the visualization, users click the Local Scenario Button component for the options Save, Load, and Delete.

After one of the three options is chosen, a dialog box appears, allowing the user to complete the operation.

Flash Player settings

An unlimited number of scenarios can be saved in every visualization, so long as enough local storage is allocated for the Flash Player. If a user attempts to save a scenario and there is not enough local storage, the Flash Player will prompt the user to allocate more. If more space is allocated, the scenario will be saved successfully. If not, the scenario will not be saved.

If a user attempts to save a scenario and local storage has been disabled, the local scenario button component will ask the user to enable local storage and automatically open the Flash Player settings. The scenario will not be saved until the user enables local storage and then saves the scenario.

The Flash Player settings can be opened by right-clicking anywhere on the Preview or exported visualization.

Note: Setting the Local Storage amount of the Flash Player below what is currently used, or disabling local storage by checking the Never box will erase all saved scenarios on the computer. This includes scenarios created in all other visualizations. The Flash Player will warn the user before allowing the scenarios to be erased.

Loading a saved scenario should restore the visualization to almost the same state it was in when it was saved. There are a few exceptions, primarily cosmetic changes, which don't directly affect the data visualization. The states of external and nested SWF files are also not restored when a scenario is loaded.

User Guide Sample: Calendar component

The Calendar component is a selector that lets you incorporate date selection into your visualizations. This sample shows the daily sales for different branches in a Bar Chart based on the date selected on the Calendar component. The Calendar lets the user scroll through either any year and month, or a fixed date range by setting a starting and ending year and month. The Calendar has two Insertion Types: Date and Day. The Date function inserts the selected date formatted in the Excel universal date format. The Day function inserts the numeric value for the selected date (day, month, and/or year).

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component

or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Place a Calendar component on the canvas.
3. Place a Bar Chart component on the canvas below the Calendar component.
4. Double-click the Calendar component to open the Properties panel.
5. Click the **Insertion Type** dropdown menu, select Date.
6. Click the **Destination** cell selector button and select an empty cell from the spreadsheet.

   Note: The cell must be empty or the functionality of the Calendar component will be compromised.

7. On the **Behavior** tab, under Default Date, click **Use Custom Date**. For this sample set the Day to 1, Month to 7 and the Year to 2007.
8. Check **Enable Calendar Limits** for the Calendar component. For this sample, set the Start Month to 7, Start Year to 2007, End Month to 7 and the End Year to 2007.
9. Click the Bar Chart component to open its Properties panel.
10. Type in the **Chart** box or click the adjacent cell selector button and select the title from the spreadsheet.

    For this sample, use "Daily Sales by Branch".

11. Click the **Subtitle** cell selector button and select the subtitle from the spreadsheet.

    For this sample, choose the "Chart Subtitle" value cell which will update based on the Calendar selection.

12. Click **Data by Series**; click the plus button to add a series to the list box.
13. Click the **Values(X)** cell selector button; for this sample select the row of cells adjacent to "Chart Data Range".

14. Click the **Category Labels (Y)** cell selector button to select the cells in the spreadsheet that contain the column headers of the Source Data, for this sample the branch names.
15. Click the **Preview** button to view the interaction between the Calendar and Bar Chart components.

As you click on the dates in the Calendar component, the Bar Chart component will display the daily sales data for all of the branches for that date.

User Guide Sample: Grid

In some visualizations, you might want to complement the graphical display of data with traditional tables that show the underlying data. One way to do this is by using a Value component, for instances where you would need multiple Value components, you can also use the Grid component. The Grid component is a collection of N number of Value components that are linked together. Each cell of the Grid component works in the same way as the Value component.

The Grid component can be used as an input or output component. Each cell of the Grid can be modified by clicking the value and dragging the value higher or lower.

This sample shows Sales by Branch. Selecting a Branch from the List Box will show the historical data for the selected Branch on the Column Chart. The Grid displays the data that underlines the Column Chart. Adjusting the data in the Grid will modify the data in the Column Chart.

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.

   For this sample, open the User Guide Sample **Listbox**. This provides the data and a visualization to add the Grid component to.
2. Expand the canvas by clicking the Fit Canvas to Window button on the Standard toolbar.
3. Place a Grid component on the canvas.
4. Double-click the Grid component to open the Properties panel.
5. Click the **Data** cell selector button; select the range of cells adjacent to "Insert In Row". This is where data used by the Column Chart is inserted.
6. Place a second Grid component on the canvas, above the first Grid.
7. Double-click the Grid component to open the Properties panel.
8. Click the **Data** cell selector button; select the column headers of the Source Data, in this sample the fiscal years.
9. On the **Behavior** tab of the second Grid, clear the **Enable Interaction** check box.

   Note: This Grid is acting as a display with text values, therefore users should not be able to interact with the values.
10. Click the **Preview** button to view the interaction between the Grid and Column Chart components.

As you click the values in the Grid and drag the pointer up or down, the values displayed in the Column Chart will be increased or decreased.

User Guide Sample: History

The History component is linked to a data point, and then records the value of that point every time it changes. It can also be configured to record the value at a set time interval.

To open the User Guide Sample file:

1. Select **File > Samples**.

2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Place a Play Selector component on the canvas.
3. Double-click the Play Selector to open the Properties panel.
4. Click the **Insertion Type** dropdown menu, select **Row**.
5. Click the **Source Data** cell selector button and select the source data.

   For this sample, select the data in the Values column.
6. Click the **Destination** cell selector button and select an empty cell. For this sample, select the top left-most cell.
7. Click the **Behavior** tab. In the **Interaction Options** section, check all **Auto** options.
8. Place a History component on the canvas.
9. Click the History component to open its Properties panel.
10. Click the **Data** cell selector button and select the same cell as the Destination cell for the Play Selector.
11. Click the **Data Destination** cell selector button and select an empty range of cells.

    Note: The size of this cell range will be the maximum number of historical changes recorded.
12. Click the **When Value Changes** radio button.
13. Place a Line Chart component on the canvas.
14. Click the Line Chart to open its Properties panel.

15. Click **Data by Range**; click the cell selector button and select the same range of cells as the Data Destination range for the History component.
16. Click the **Data in Columns** radio button.
17. Click Preview to view the interaction between the History component and the Play Selector and Line Chart components.

In this sample, the Play Selector has a fixed series of data points. The selector inserts each point in sequence into a cell of the spreadsheet. The History component records the value in this cell each time it changes. The Line Chart then displays the history of changes as recorded by the History component.

User Guide Sample: Reset Button

The Reset Button component can be added to a visualization to allow users to reset all components to the values displayed when the visualization was loaded. This sample has three Sliders that affect the value displayed. By clicking the Reset Button the Sliders and Value component are reverted to their original values.

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Place a Horizontal Slider component on the canvas.
3. Double-click the Horizontal Slider to open the Properties panel.

4. Click the Title cell selector button and select the title for the Slider; for this sample, select "Cost per Item".
5. Click the Data cell selector button and select the data for the Slider; for this sample, select the "Cost per Item" value.
6. Repeat steps 3-5, using "Quantity Sold".
7. Repeat steps 3-5, using "Sales Price".
8. Place a Value component on the canvas.
9. Click the Value to open its Properties panel.
10. Click the Title cell selector button and select the title; for this sample select "Net Profit".
11. Click the Data cell selector button and select the data for "Net Profit".
12. Place a Reset Button component on the canvas.
13. Click Preview to view the interaction between the Slider and Value components, and how the Reset Button affects that interaction.

In this sample, the Slider components adjust the value displayed by the Value component. Clicking the Reset Button clears any adjustments made to the Sliders and reverts the Value component to its original number.

User Guide Sample: Trend Analyzer

The Trend Analyzer combines data analysis and visualization. The component analyzes the data selection and provides an additional data series that can be plotted to display a trend line. The Trend Analyzer does not display in the visualization.

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Place a Combination Chart component on the canvas.
3. Double-click the Combination Chart to open the Properties panel.
4. In the **Chart** box, type "Stock Price Trend Analysis".
5. Click **Data by Series**; click the plus button to add a series to the list box.
6. In the **Name** box, type "Price".
7. Click the **Values (Y)** cell selector button and select the Source Data for this series; for this sample, select the data under the column header "Price".
8. Click the plus button to add another series to the list box.
9. In the **Name** box, type "Trend".
10. Click the **Values (Y)** cell selector button and select the Source Data for this series; for this sample, select the empty cells under the column header "Analyzed Trend Data".
11. Click the **Category Labels (X)** cell selector button and select the data labels; for this sample select the data under the column header "Date".
12. Click the Appearance tab; click the Series sub-tab.
13. For the series "Price," click the **Type** dropdown menu and select **Column**.
14. For the series "Trend," click the **Type** dropdown menu and select **Line**.
15. Place a Trend Analyzer component on the canvas.
16. Click the Trend Analyzer to open its Properties panel.
17. Click the **Data** cell selector button and select the data to be analyzed for trending; for this sample, select the data under the column header "Price".
18. In the Trend/Regression Type section, click the **Use Best Fit** radio button.
19. Click the **Analyzed Data Destination** cell selector button and select an empty range of cells for the new data series to be inserted into; for this sample, select the empty cells under the column header "Analyzed Trend Data".
20. Click **Preview** to view the between the Combination Chart component displayed with a trend line.

In this sample, the Trend Analyzer component analyzes the selected data and determines a the best way to display a trend line for the data.

Using the Art and Background components

Art and backgrounds can be used to enhance your visualizations. The background components can be used to import images or Flash movies into your Xcelsius 2008 visualization.

For more information about Art and Background components, see *Art and Background Components Reference* on page 321.

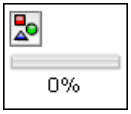
Art and background components can be used to customize visualizations:

- Background

  Backgrounds are prebuilt artwork that you can add to your visualizations to assist layout and improve design. Backgrounds can be used to create divisions and designate groups of related components.

- Image Component

  The image component can be used to display JPEG images or SWF files. You can add your own logos or artwork into an Xcelsius 2008 visualization. You can also add videos, animations, and other interactive elements by importing a Flash file.

- Rectangle

  A rectangle that you can add to your visualizations to outline, define, or contain sections.

- Ellipse



An ellipse or circular shape that you can add to your visualizations to outline, define, or contain selections.

- Line

A vertical or horizontal line that you can add to your visualizations to outline, define, or contain sections.

How to use the Image component

Use the Image component to display JPEG images. This allows you to add your own logos or artwork to an Xcelsius 2008 visualization.

Note: Progressive JPEGs and JPEGs with CMYK coloring, as opposed to the standard RGB coloring, are not supported.

You can also add videos, animations, and other interactive elements by importing a Flash files. Since Xcelsius 2008 visualizations are Flash files, you can use this feature to add an exported Xcelsius 2008 visualization into another Xcelsius 2008 visualization.

Note: Flash Player versions 9 and later have new security features which may prevent your Xcelsius 2008 visualization from connecting with an external data source. Without a policy file, SWF files from one domain cannot access data on another domain or sub-domain. In addition, SWF files served over HTTP cannot access data at a HTTPS location. Please refer to the online article from Adobe regarding security restrictions for data loading for information on creating a policy file to allow access to data in the cases above.

Embedding external files

When importing external files into the Image components, you may choose wheter or not to embed the file. If you do so, it will become a part of the SWF file that is created when the visualization is exported.

If you choose not to embed the file, at runtime the file will be loaded into the exported visualization as needed. When the visualization is exported, all of the non-embedded external files used in the visualization are written out to a folder with the same name and location as the exported visualization. The visualization will load the external files from this folder. The visualization and folder must exist in the same directory for the external files to be loaded correctly.

The decision to embed the file will depend on your specific needs.

The main advantages for embedding files are as follows:

- Embedded files let you distribute your entire visualization in a single file.
- Dynamic Visibility is faster as reloading is not necessary.
- Embedded files maintain their state when hidden with Dynamic Visibility.

The main advantages for not embedding files as follows:

- Possible runtime performance increases since the external files are unloaded when they are hidden with Dynamic Visibility.
- Shorter load times for the application since external files are loaded only when necessary.
- The visualization does not need to be re-exported if external file changes.

Regardless of which option you choose, Xcelsius 2008 stores a local copy of the file internally in the XLF file. The original file is no longer accessed or used in the visualization. An XLF file with embedded content can be moved or emailed and the contents of the file will travel with it. XLF files with non-embedded content will need to be updated if external files are moved or the XLF is moved. These XLF files must be emailed or moved with the folder Xcelsius 2008 created with the same name.

In certain cases, you may not want to use local copies of images, but rather load an image from a specified URL at runtime.

Nested external files

Xcelsius 2008 lets you use external SWF files in your visualizations. These SWF files may, in turn, have external assets such as other SWF files, images, or XML files. The external assets used by the SWF that are referenced with relative paths must be available from the location of the host visualization.

For example, if you have a SWF file located at z:\file.swf, which loads an external image at z:\images\myImage.jpg, and you use the SWF file within your visualization at c:\visualization.xlf, the SWF file will attempt to load an image at c:\images\myImage.jpg, which is the location of the visualization.

In the following example, you can insert a corporate logo into your visualization.

To create an Xcelsius 2008 visualization with an image component

1. Place an Image component on the canvas.
2. Double-click the image component to open the Properties panel.
3. Click **Import**.
4. Navigate to and select the JPEG or SWF file.
5. Click **Open**.
6. Select **Embed File** to have a copy of the image stored in the visualization. Your logo is imported into the visualization at its default size. You can now place and resize the image.

   Tip: Click **Resize Image to Component** to prevent the image from loading and automatically changing the size of the component.

Using the Web Connectivity components

This category contains a group of components that provides options for linking your visualizations to the Web.

For more information about Web Connectivity components, see *Web Connectivity Components Reference* on page 339.

- URL Link Button

  A button that links to a relative or absolute URL when pressed.

- Slide Show



The Slide Show component creates a slide show of URL-based images and SWF files.

Unlike the normal Image Component, which requires that you first Import the file, the Slide Show component loads the image at the URL specified in the URL data source.

Note: When an image is imported into normal Image Components, Xcelsius 2008 stores its own local copy of the file internally in the XLF file. The original file is no longer accessed or used in the visualization. Because the file data is stored within the XLF, the XLF can be moved or emailed and the contents of the file travels with it. The Slide Show points to a URL, however, which can change at runtime. This means that the image does not travel with the XLF. Therefore the image must be available to the SWF at runtime.

Note: Whenever the Slide Show URL changes, it attempts to load in the image at that location. Once it has loaded the image, it will transition from the current image to the new one specified at the URL data source.

Note: Flash Player versions 9 and later have new security features which may prevent your Xcelsius 2008 visualization from connecting with an external data source. Without a policy file, SWF files from one domain cannot access data on another domain or sub-domain. In addition, SWF files served over HTTP cannot access data at a HTTPS location. Please refer to the online article from Adobe regarding security restrictions for data loading for information on creating a policy file to allow access to data in the cases above.

Note: This component is not available in Xcelsius Present.

- Connection Refresh Button



A button that manually refreshes the connection it is linked to.

Note: This component is not available in Xcelsius Present.

For more about this component, please see *User Guide Sample: Connection Refresh Button – XML Data Connection* on page 164.

- Reporting Services Button



The Reporting Services Button component enables you to connect to the XRS server and select the report that will be used to populate the visualization.

Note: This component is only available in Xcelsius Engage Server and BusinessObjects Xcelsius Enterprise.

Exporting Xcelsius 2008 Visualizations

chapter 7

Overview

This section provides information on exporting your Xcelsius 2008 visualizations. All versions of Xcelsius 2008 provide the following export options:

- PowerPoint
- PDF
- Outlook
- Word

In addition to the above, Xcelsius Engage versions also have the following options:

- Adobe Flash (SWF)
- HTML

In addition to all of the above options, BusinessObjects Xcelsius Enterprise also has the following option:

- Export to Business Objects Platform

  This option provides the ability to export to either BusinessObjects Enterprise or Crystal Reports Server.

Exporting your visualization to PowerPoint

Once your visualization is complete, you can export it as a PowerPoint slide. You can then modify the slide using Microsoft PowerPoint.

To export an Xcelsius 2008 visualization to PowerPoint

1. Create an Xcelsius 2008 visualization.
2. Select **File>Export**, then select PowerPoint Slide, or click the Export to PowerPoint button  in the toolbar.

The **Save As** dialog box appears.

3. Enter a name for the PPT file, and click **Save**.

Xcelsius 2008 generates the PowerPoint (PPT) file and a SWF file with the same name. The generated PowerPoint file is automatically opened and the visualization will be visible on the first slide of the presentation. When the presentation is run, the visualization is dynamic and interactive.

Note: When the visualization is exported, any external files are placed in a folder with the same name and location as the exported visualization. The external files must remain in the same folder as the visualization for the visualization to work properly.

Exporting your visualization to Adobe PDF

Once your visualization is complete, you can export your content as an Adobe® Portable Document Format (PDF) file. The PDF file can be viewed locally, opened in a browser, or deployed on a web site. The visualization is embedded in the PDF and is dynamic and interactive.

To export an Xcelsius 2008 visualization to Adobe PDF

1. Create an Xcelsius 2008 visualization.
2. Select **File> Export**, then select **PDF**, or click the Export to PDF button  in the toolbar.

   The Save As dialog box appears.

3. Enter a name for the PDF file, and click **Save**.

Xcelsius 2008 generates the Adobe PDF file. The generated PDF file is automatically opened and the visualization is visible on the first page of the document. The visualization in the PDF file is dynamic and interactive.

Note: When the visualization is exported, any external files placed in a folder with the same name and location as the exported visualization. The external files must remain in the same folder as the visualization for the visualization to work properly.

Emailing your visualization with Outlook

Once your visualization is complete, you can export it using Microsoft Outlook.

To email an Xcelsius 2008 visualization with Outlook

1. Create an Xcelsius 2008 visualization.
2. Select **File >Export**, then select **Outlook**, or click the Export to Outlook button  in the toolbar.

Xcelsius 2008 generates a SWF file. Outlook launches a new email message window and the SWF file is attached to a new email. You can then customize and send the email.

Exporting your visualization to Word

When your visualization is complete, you can export it to a Microsoft Word document. The visualization in the Microsoft Word document is dynamic and interactive.

To export an Xcelsius 2008 visualization to Word

1. Create an Xcelsius 2008 visualization.
2. Select **File >Export**, then select **Word**, or click the Export to Word button  in the toolbar.

   The Save As dialog box appears.
3. Enter a name for the Word document, and click Save.

Xcelsius 2008 generates a Word document and embeds a SWF of your visualization in the document.

Note: If your visualization in Word is static, on the Microsoft Word **Control** toolbar click the Exit Design Mode button  .

Exporting your visualization to Flash

Once your visualization is complete, you can export your content as an Adobe Flash (SWF) file. The SWF file can be executed locally with the standalone Flash player, opened in a browser, used as part of a web site, or imported into a number of different programs.

Note: This export option is only available in Xcelsius Engage versions.

To export an Xcelsius 2008 visualization to Flash

1. Create an Xcelsius 2008 visualization.
2. Select **File > Export**, then select **Flash (SWF)**.

   The Export dialog box appears.
3. Enter a name for the SWF file, and click **Save**.

Xcelsius 2008 generates the Adobe Flash file.

Note: If there are any non-embedded external files in the visualization, a folder containing those files is also generated with the same name and location as the exported file. The visualization loads the external files from this directory at runtime. The visualization and folder must exist in the same directory for the external files to be loaded correctly.

Exporting your visualization to HTML

Not all computers are configured to open Flash files in the browser. By embedding your SWF visualization in an HTML file, you ensure that your users can view the visualization simply by double-clicking one file. The generated HTML document references your SWF visualization.

Note: This export option is only available in Xcelsius Engage versions.

To export an Xcelsius 2008 visualization to HTML

1. Create an Xcelsius 2008 visualization.

2. Select **File > Export**, then select **HTML**.

   The Save as HTML dialog box appears.

3. Enter a name for the HTML file, and click **Save**.

Xcelsius 2008 generates the HTML file and a SWF file with the same name, and saves them in the selected directory. These files must be kept together in order for the HTML file to work properly.

Exporting your visualization to an Enterprise folder

When your visualization is complete, you can export it to a folder in BusinessObjects Platform or Crystal Reports Server.

Note: This export option is only available in BusinessObjects Xcelsius Enterprise versions.

To export an Xcelsius 2008 visualization to an Enterprise folder

1. Create an Xcelsius 2008 visualization.
2. Select **File >Export**, then select **Business Objects Platform**, or click the Export to Business Objects Platform button  in the toolbar.

   The Log On to BusinessObjects Enterprise dialog box appears.

3. Enter your logon information.
   - In the **System** field, type the name of the Central Management Console (CMC) that you want to export the SWF file to.

     The CMC stores information about the objects saved to the Enterprise system. For more information about the CMC , refer to the BusinessObjects Enterprise or Crystal Reports Server guides.
   - In the **User name** and **Password** fields, type your logon credentials.
   - From the **Authentication** list, select the authentication type.

If you are unsure of your logon information, contact your system administrator.

4. Click **OK**.

   The **Save As** dialog box appears and displays the folder structure of the Enterprise repository.

5. Select the folder that you want to export the SWF file to, enter a file name, and click **Save**.

   The SWF file is exported to the Enterprise repository.

Taking a Snapshot of your visualization

In Preview mode, you can interact with the visualization just the same as an end user will. If you find a scenario or combination of settings while in Preview mode, you can take a snapshot of the visualization.

To access the Snapshot tool, select **File > Snapshot**, then select one of the following export methods:

- Current Excel Data

  An Excel spreadsheet (XLS) with the current data values is generated.

  Tip: This can be a useful tool for diagnosing dashboards that are not performing as desired.

- PDF

  An Adobe PDF file with the current state of the components is generated.

- PowerPoint Slide

  A Microsoft PowerPoint file with one slide that contains a Flash (SWF) file with the current state of the components is generated.

- Outlook

  A Microsoft Outlook email that attaches the Flash (SWF) file with the current state of the components is generated.

The following Snapshot export options are only available in Xcelsius Engage versions:

- Flash (SWF)

A Flash (SWF) file with the changes made in preview mode is generated.

- HTML

  An HTML file and a Flash (SWF) file with the current state of the components is generated.

Using Advanced Features

chapter 8

Overview

This section provides an introduction to the more advanced functionality that can be used to customize Xcelsius 2008 visualizations.

Dynamic Visibility functionality

For information on the specific dynamic visibility options, see *Dynamic Visibility* on page 239.

You can show or hide components in your visualization with dynamic visibility. For example, you can add a Toggle Button to display a specific chart. The Toggle Button can be configured to toggle between inserting *showChart* and *hideChart* into a Destination cell when it is selected. By linking the Chart's status to this Destination cell and setting the Chart's Key to *showChart*, the Chart becomes visible when the Toggle Button inserts the value *showChart* and hidden when the Toggle Button inserts *hideChart*.

You may want to switch between a number of components. To accomplish this, use the Key and a Selector. For example, a visualization might need to toggle between different charts. To achieve this, give each chart a unique Key, such as **chart1** or **chart2**. Link each Chart's Status to the same cell in the spreadsheet. Add a List Box with Source Data that matches the Chart Keys. As the List Box value is inserted into the Status cell, the corresponding chart is made visible, while the others are hidden.

User Guide Sample: Dynamic Visibility

Dynamic Visibility allows users to control the visibility of components in a visualization. In this sample, the Check Box is used to toggle the visibility of the Line Chart. Clicking the Check Box inserts a certain value into a cell. The Dynamic Visibility Status of the Line Chart is also linked to this cell. The Line Chart will appear or disappear depending on whether the value in the Status cell matches its Dynamic Visibility Key.

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.

3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Place a Check Box component on the canvas.
3. Place a Column Chart component on the canvas.
4. Double-click the Check Box component to open the Properties panel.
5. Click the Source Data **Manual Edit** button and set the values to be inserted when the Check Box is checked and unchecked. Click **OK**.

   For this sample, use the default values of 0 for Unchecked and 1 for Checked.
6. Click the Destination cell selector button and select an empty cell from the spreadsheet.
7. Click the Column Chart to open its Properties panel.
8. Click **Data by Series**; click the plus button to add a series to the list box.
9. Click the Name cell selector button and select the name of the first series. For this sample, select "Market Growth."
10. Click the **Values(Y)** cell selector button and select the data for the first series.
11. Repeat Steps 8-10 for the second series "Sales Growth."
12. Click the **Category Labels (X)** cell selector button to select the cells in the spreadsheet that contain the column headers, for this sample the years.
13. On the Behavior tab, click the Dynamic Visibility Status cell selector button and select the Destination cell for the Check Box.
14. Set the Dynamic Visibility Key value to match the Source Data of the Check Box component. For this sample, use the default value of 1.

15. Click Preview to view the interaction between the Check Box and Line Chart components.
16. Click the Check Box to display the Line Chart, and un-check to hide the Line Chart.

Note: By default, the Check Box status is unchecked. Therefore, when you Preview the visualization, the chart will not be initially visible. Users must click on the Check Box to enable the chart's visibility. This can be changed by modifying the Line Chart's Dynamic Visibility Key value, or by changing the Selected Item to Checked on the Behavior tab of the Check Box component.

User Guide Sample: Status List

Selector components can be configured to insert different forms of data in the spreadsheet. This sample provides an example of the Insertion Type: Status List in conjunction with the Dynamic Visibility functionality. The visualization has different charts displaying the revenue of the selected region. Selecting the radio button for a region will display the corresponding chart.

The Insertion Type: Status List functions so that when a selection is made on the selector component a value of 1 is entered in the cell of the Destination range corresponding to that selection, and a value of 0 is entered in all other cells in the Destination range. For example, if the second of three options is selected, the values 0, 1, 0 will be inserted into the Destination range.

You can open this User Guide Sample by selecting File**>**Samples, select the User Guide Samples category and then selecting the file name under Items. The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the below step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats or components may have been added to enhance the appearance of the sample visualization.

Note: The completed sample XLF file with embedded spreadsheet data, and SWF file, for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.

1. Place a Radio Button component on the left side of the canvas.
2. Double-click the Radio Button component to open the Properties panel.
3. Click the Labels cell selector button and select the cells containing the labels for the buttons from the spreadsheet. For this sample, the cells should contain the region names.
4. On the Insertion Type list, click Status List.
5. Click the Destination cell selector button and select an empty column of cells. For Status List, the Destination range must have the same number of cells as the number of Labels. For this example, the range of cells must have five cells, one for each of the region names.
6. Place the following charts on the canvas, placing them on top of each other: Pie Chart, Line Chart, Column Chart, Bar Chart, Pie Chart
7. Using the Object Browser, click on the first Pie Chart to open its Properties panel.
8. Click the Data Values cell selector button and select the data for the North America region. Click the Data by Rows radio button. Type the region name in the Chart box.
9. Click the Labels cell selector button and select the column headers of the source data, for this sample select the product names.
10. Repeat steps 8-10 for the second pie chart, using the Australia & Pacific region.
11. Using the Object Browser, click on the Line Chart to open its Properties panel.
12. Click **Data by Series**; click the plus button to add a series to the list box.
13. Click the **Values(Y)** cell selector button and select the data for the Latin America region.

1. Type the region name in the Chart box.
2. Repeat steps 12-15 for the Column and Bar Charts, using the Europe and Asia regions.
3. Using the Object Browser, click the first Pie Chart used for the North America region.
4. On the Behavior tab, click the Dynamic Visibility Status cell selector button and select the first cell of the Destination range for the Radio Button. For

this sample, North America is the first Label on the Radio Button; therefore the North America chart's visibility will correspond to the first cell.

5. Set the Dynamic Visibility Key to 1.
6. Repeat steps 17-19 for the other charts and their corresponding regions. Link the Latin America chart's Status cell to the second cell of the Destination range, and so on according to the spreadsheet order.
7. Click Preview to view the interaction between the Radio Button and Chart components.

When a region is selected on the Radio Button component, a value (in this sample Status List was selected, so the value equals 1) is inserted in the spreadsheet in the cell of the Destination range that corresponds to that region's position in the list of regions. All of the other Destination range cells have the value zero (0). The visibility of all the charts is also linked to the Destination range. Each chart has been configured to be visible only when its corresponding cell has the value 1 inserted. Since only one cell in the range has the value 1 at any given time, only one chart at a time is visible.

Ignore End Blanks for variable length ranges

Series: Ignore End Blanks

Select the Series: Ignore End Blanks option to prevent all of the empty series **past the last non-empty series** from being displayed in the Chart. This option is useful when you need to display a variable number of series in your Chart.

For example, you may want to create a model in which users select a region and then see statistics for every store within that region all in one chart. Each series in the Chart would represent one store within the region, and the values of the series would represent the different statistics for that store. Since each region may have a different number of stores, Series: Ignore End Blanks could be enabled so that the number of series displayed in the Chart could vary to match the number of stores within each region.

For this example:

1. Link the Chart to a range with the same number of series as the maximum number of stores within any region.
2. Configure your model so that when a user selects a region:

- the store statistics for all of the stores within that region are inserted into the beginning of the Chart Data range.
- the rest of the series ranges are filled with empty values.

3. Enable Series: Ignore End Blanks on the Chart.

This feature allows just one Chart to display all of the store statistics for every region.

Note: Although the Chart may not be displaying all of the data within the Data range, the performance of the model will be affected by the actual size of the range.

Values: Ignore End Blanks

Select the Values: Ignore End Blanks option to prevent all of the empty values **past the last non-empty value** from being displayed in the Chart. This option is useful when you need to display a variable amount of data in your Chart.

For example, you may want to create a model in which users select a region and then see the total sales for every store within that region in a chart. Each value within the Chart would represent the total sales of one store. Since each region may have a different number of stores, Values: Ignore End Blanks could be enabled so that the number of values displayed in the Chart could vary to match the number of stores within each region.

For this example:

1. Link the Chart to a range with the same number of values as the maximum number of stores within any region.
2. Configure your model such that when a user selects a region:
   - the sales figures for the stores within that region are inserted into the beginning of the Chart Data range.
   - the rest of the Chart Data range is filled with empty values.
3. Enable Values: Ignore End Blanks on the Chart.

This feature allows just one Chart to display all of the sales figures for every region.

Note: Although the Chart may not be displaying all of the data within the Data range, the performance of the model will be affected by the actual size of the range.

Alerts

For information on Alert tab settings, see *Alerts Tab* on page 241.

Alerts are commonly used to call the attention of the user to a specific item or action that has reached some pre-established limits. These limits are often called targets, budgets, benchmarks, etc. and are a standard to which an item is compared. In all mature Business Intelligence applications, you will find the capability to trigger alerts when some conditions are not met. Xcelsius 2008 has one of the most advanced and user friendly Alert methods available. Its flexibility, use, and application is covered in this section.

Xcelsius 2008 lets you define alerts on most charts and single-value components. When alerts are enabled on these components, the component will represent the current level of the alert by displaying the specific color that corresponds to that level.

How to Use Alerts

Using simple and easy-to-understand methods, you can configure and customize the Alert levels, colors, methods, etc.

On the Properties panel, select the Alerts Tab. This tab is available for most Charts and Single Value components. Some Selector components have Alerts functionality as well.

Note: Alerts can be enabled in Chart components with only a single series.

User Guide Sample: Alerts – Selectors

Alerts can now be added to the following selector components: Label Based Menu, Combo Box, List Box, List Builder, and Ticker.

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open

the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Place a Label Based Menu component on the canvas.
3. Double-click the Label Based Menu to open the Properties panel.
4. Click the **Labels** cell selector button and select the labels for the selections in the menu; for this sample select the product names.
5. On the **Insertion Type** dropdown menu, select Rows.
6. Click the **Source Data** cell selector button and select the data corresponding to the Labels.
7. Click the **Destination** cell selector button and select a range of empty cells.
8. Click the Alerts tab; check **Enable Alerts**.
9. Click the Alert Values cell selector button and select the range of cells with alert values; for this sample select the "Average Sales" data.
10. Click the **By Value** radio button.
11. In the Color Order section, click the **High Values are Good** radio button.
12. Place a Column Chart component on the canvas.
13. Click the Column Chart to open its Properties panel.
14. Click **Data by Series**; click the plus button to add a series to the list box.
15. Click the **Values (Y)** cell selector button and select the same range of cells as the Source Data for the Label Based Menu component.
16. Click the **Category Labels (X)** cell selector button and select the column headers of the Source Data range.
17. Click **Preview** to view the interaction between the Label Based Menu and Column Chart components.

In this sample, the Label Based Menu can alert the user to values in the Column Chart that may require closer attention.

User Guide Sample: Alerts – Single Value

This sample provides a demonstration of the alert functionality applied to the Gauge component. The alert levels show the Actual Values vs. the Target Values for the accounts Revenues, Inventory, and the Cost of Goods Sold. Using the Slider component, the Actual Values can be adjusted up or down which will trigger different alert level displays.

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius file that contains the data you would like to use.
2. Place a Gauge component on the right of the canvas.
3. Double-click the Gauge component to open the Properties panel.
4. Click the **Title** cell selector button and select the cell containing the title for the Gauge component. For this sample, use the value "Sales".
5. Click the **Data** cell selector button and select the Actual Value for Sales.
6. In the Scale section, click **Manual**. Set the **Minimum** and **Maximum Limits** to 99 and 500 respectively.
7. On the Alerts tab, click **Enable Alerts**.
8. Click **As Percent of Target**, click the cell selector and select the Target value for Sales.
9. In the Color Order section, click **High Values are Good**.

10. In the Alert Location section, check both **Background** and **Marker**.
11. Place a Horizontal Slider component under the Gauge.
12. Click the Slider to open its Properties panel.
13. Click the **Data** cell selector button and select the Actual Value for Sales.
14. In the Scale section, click **Manual**. Set the **Minimum** and **Maximum Limits** to 99 and 500 respectively.
15. Repeat steps 2-14, customizing the second Gauge and Slider components to display the "Inventories" data. For both components, set the Scale **Minimum** and **Maximum** limits to zero (0) and 108 respectively. For the Gauge, in the Color Order section, click **Middle Values are Good**.
16. Repeat steps 2-14, customizing the third Gauge and Slider components to display the "Cost of Goods Sold" data. For both components: set the Scale **Minimum** and **Maximum** limits to zero (0) and 440 respectively. For the Gauge: in the Color Order section, click **Low Values are Good**.
17. Click the **Preview** button to view the interaction between the Gauge and Slider components.

Dragging the Slider adjusts the Actual Value of each account. The affect on the alert display of increasing or decreasing the Actual Value varies based on whether it should be higher or lower than the Target Value. Sales values should be high, while the Cost of Goods Sold should be low, and Inventory amounts should be as close as possible to its Target.

Creating templates

Xcelsius 2008 offers a set of templates you can use to create a new visualization. You can also create a visualization from scratch and save it as a template.

To open a template, on the File menu, click Templates. A list of available Categories is available. Each Category contains a group of templates that are displayed under the Items section. As you select each template in the list, a preview of the template is shown on the right side of the screen. You can click on the selectors to see the intended functionality of the components. Select a template from the list and click **OK.**

When selected, the template is inserted on the canvas as a new visualization. You can now add, delete or modify the template, and save it as a new visualization or as a modified or new template.

Note: Templates are not bound to any data. They demonstrate assorted layouts and combinations of components.

Custom-made templates

You can create your own templates. For example, if you are creating a set of Portlets for use in your corporate portal, you may want to save your visualizations as templates so that you can re-use them when updates are necessary.

To create a new template

1. Create the Xcelsius 2008 visualization you want to save as a template.
2. On the **File** menu, click **Save As**.

   The Save As dialog box appears.

3. Navigate to:

   ```
   C:\Program Files\Business Objects\Xcelsius 2008\assets\template
   ```

   Note: To create a new Category, create a new folder under the \template directory of the Xcelsius 2008 installation.

4. Enter a file name for the template, and click **Save**.
5. On the **File** menu, point to **Export**, and click **Flash (SWF)**.
6. Navigate to the templates folder.
7. Enter the same file name for the SWF file that you entered for the template, and click **Save** to export the visualization.

   Note: Exporting the Flash (SWF) creates the template preview that will be displayed in the Preview section of the Templates window.

The visualization is now available as a template. The next time you open the templates window, your template will be available for preview and use.

Using Advanced Features in Xcelsius Engage

chapter 9

Using the Data Manager

The Data Manager is a central place to configure and manage external connections in your visualization.

You can configure the following types of connections:

New Connections

- Query as a Web Service (QaaWS)

  Note: This connection type is only available in BusinessObjects Xcelsius Enterprise.

- Web Service Connections
- XML Data Connections
- FlashVariable (flashvars)
- Portal Data
- Crystal Report Data Consumer
- FS Command
- LiveCycle Data Services (LCDS)

Existing Connections

- Excel XML Maps
- Live Office connections

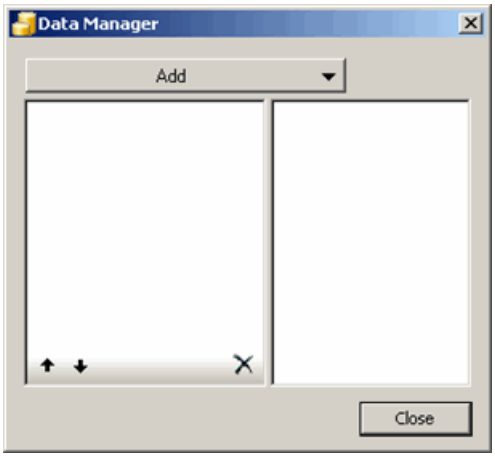
  Note: This connection type is only available in BusinessObjects Xcelsius Enterprise only.

The Data Manager can be used to add several types of XML-compliant data connections to your visualization. The Data Manager will also detect any existing connection types when a visualization is opened. Some connection types are not available to add as a new connection, but are supported only as existing connections in data sources created outside of Xcelsius 2008. These connection types are listed in the **Add** menu under **Existing: Excel XML Maps** and **Live Office Connections**.

To add a connection

1. Select **Data > Connections**, or click the Manage Connections button in the toolbar.

   The Data Manager dialog box appears.

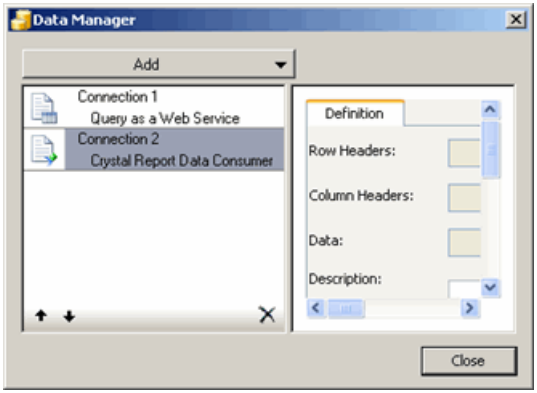


2. Click the **Add** button and select a connection type from the list.
3. Configure the connection. See *Configuring Connections with the Data Manager* on page 156 for more information.

To remove a connection

1. Select **Data > Connections**, or click the Manage Connection button on the toolbar.

   The Data Manager dialog box appears.

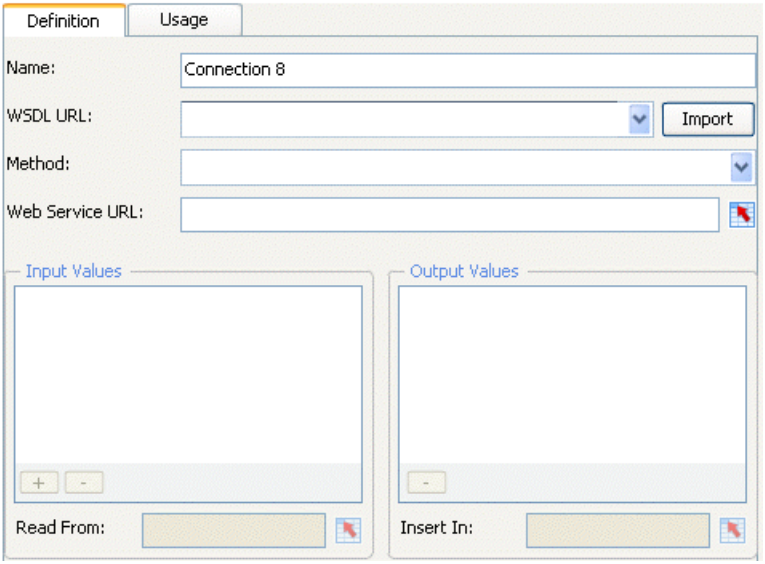


2. Select the connection you want ro remove and click the Delete button at the bottom of the connections list.

Configuring Connections with the Data Manager

This section discusses configuring data connections with the Data Manager.

Configuring QaaWS connections



Add or edit the following connection parameters for Querying as a Web Service (QaaWS) Connections:

Note: This Data Connection is only available in BusinessObjects Xcelsius Enterprise.

Definition Tab

- Name

  Type a name for the connection.

- WSDL URL

  Type the URL for the WSDL that you would like to bind the connection to, or select one from the drop-down menu..

- Import

  Click on the Import button to bind the connection to the WSDL that was entered into the WSDL URL text box.

- Method

  Select the method that you would like to bind the Query as a Web Service Connection.

- Web Service URL

  Type the URL for the Web Service, or select a cell from the spreadsheet.

- Input Values

  Select a node from the tree to bind the node to the spreadsheet. Selecting a node enables the Input Value selection icons.

- Read From

  Select a cell in the spreadsheet that will provide data for the Query as a Web Service Connection to read from.

- Output Values

  Select a node from the tree to bind the node to the spreadsheet. Selecting a node enables the Output Value selection icon.

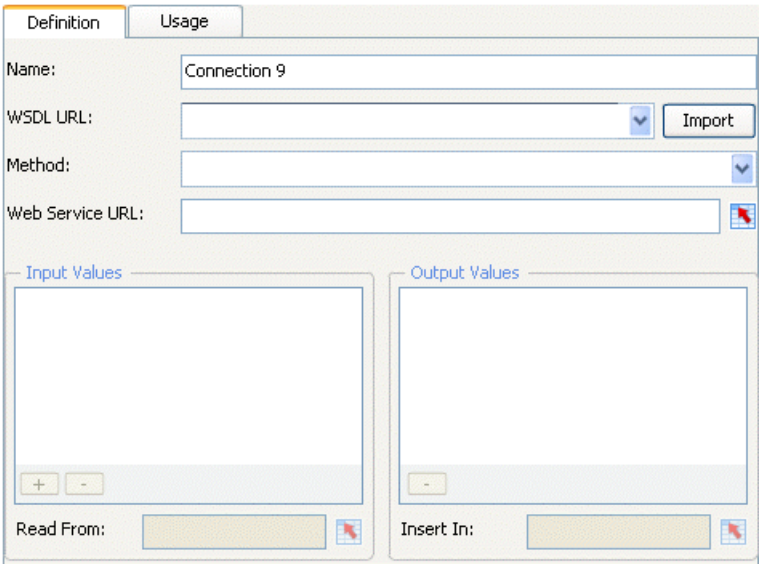
- Insert In

  Select a destination cell for the Output Values.

Usage Tab

See *Usage Tab* on page 191 for Data Manager Usage Tab options.

Configuring Web Service Connections



Add or edit the following connection parameters for Web Service Connections:

Definition Tab

- Name

  Type a name for the connection.

- WSDL URL

  Type the URL for the WSDL that you would like to bind the connection to, or select from the dropdown.

- Import button

  Click on the Import button to bind the connection to the WSDL that was entered into the WSDL URL text box.

- Method

Select the method that you would like to bind the Web Service Connection to.

- Web Service URL field

  Enter the URL for the Web Service, or click the cell selector to select a cell in the spreadsheet.

- Input Values

  Select a node from the tree to bind the node to the spreadsheet. Selecting a node enables the Input Value selection icon.

- Read From

  Select a cell in the spreadsheet that will provide data for the Web Service Connection to read from.

- Output Values

  Select a node from the tree to bind the node to the spreadsheet. Selecting a node enables the Output Value selection icon.

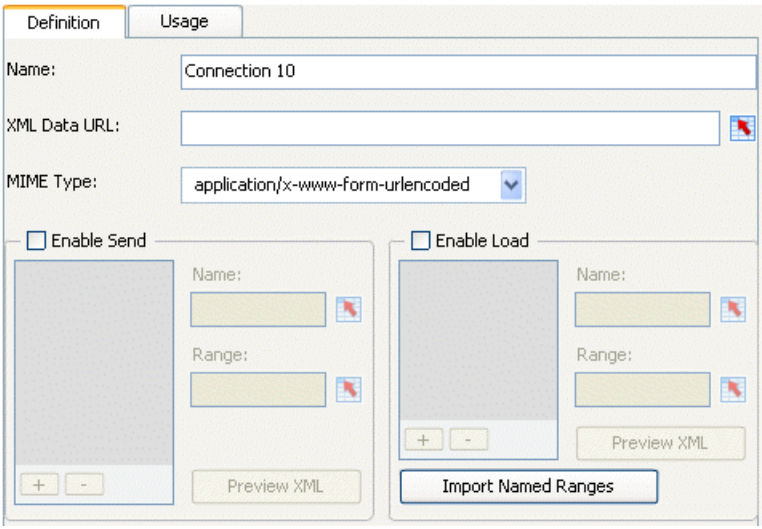
- Insert In

  Select a destination cell for the output values.

Usage Tab

See *Usage Tab* on page 191 for Data Manager Usage Tab options.

Configuring the XML Data Connection



With the XML Data Connection, you can refresh visualization data from an external source through HTTP. The connection can be used to send live visualization data to an external source; for example, form submission and data collection.

The data can be refreshed and sent periodically and automatically or on demand when combined with the Connection Refresh Button component.

Note: Flash Player versions 9 and later have new security features which may prevent your Xcelsius 2008 visualization from connecting with an external data source. Without a policy file, SWF files from one domain cannot access data on another domain or sub-domain. In addition, SWF files served over HTTP cannot access data at a HTTPS location. Please refer to the online article from Adobe regarding security restrictions for data loading for information on creating a policy file to allow access to data in the cases above.

The XML Data connection lets you use send and load functionality simultaneously through one URL. The send ranges are sent to the URL prior to retrieving the load data. This lets you create scripts which examine the sent data and return data that corresponds to the values sent —much like a web request. For example, if a date was sent to a server script, the script could return the sales figures for that date.

Excel ranges are mapped to XML using a row-column structure. For example, a one-row, three-column range named "ExampleRange" would be represented in XML with:

```
<variable name="ExampleRange">
  <row>
    <column> Row1 Column1 value </column>
    <column> Row1 Column2 value </column>
    <column> Row1 Column3 value </column>
  </row>
</variable>
```

where "Row1 Column1 value" would be the actual value of the cell in the first row and first column of the range, and so on.

The entire group of ranges is encapsulated within <data> tags.

During a load, XML is translated into Excel ranges using the reverse process.

Configuring XML Data Connections

Add or edit the following connection parameters for XML Data Connections:

Definition Tab

- Name

  Enter a name for the connection.

- XML Data URL

  Type the URL for the button or use the Cell Selector button to select a cell in the embedded spreadsheet. Any change to the value of this cell will update the URL button with the link to the new value

  Note that http:// is required for hyperlinks.

- MIME Type

  Select the MIME Type from the drop-down menu.

- Enable Load

  Select this check box to load the XML data at the URL into the Load Ranges when the connection is triggered.

  - List Box

    Select a range in the list box to edit the cell selection for that range.

  - Add

    Use the Add button to add a new range.

  - Remove

    Use the Remove button to delete the highlighted range from the list.

  - Name

    Type a name for the selected range, or use the cell selector button to link to a cell in the spreadsheet.

  - Range

    Use the Range cell selector select the cells from the spreadsheet.

  - Preview XML button

    Use the **Preview XML** button to see the structure of the XML that your visualization needs to receive data from the external data source.

  - Import Named Ranges

    Use this button to import named ranges from the spreadsheet.

- Enable Send

  Select this check box to send the XML data to the URL from the Send Ranges when the button is triggered. Edit the ranges that are translated to XML and sent to the URL. The translated ranges are sent via HTTP using the POST method.

  - List Box

    Select a range in the list box to edit the cell selection for that range.

  - Add

Use the Add button ⊞ to add a new range.

- Remove

  Use the Remove button ⊟ to delete the highlighted range from the list.

- Name

  Type a name for the selected range, or use the cell selector button to link to a cell in the spreadsheet.

- Range

  Use the Range cell selector to select the cells from the spreadsheet.

- Preview XML button

  Use the **Preview XML** button to see the structure of the XML that your visualization needs to send data to the external data source.

Usage Tab

See *Usage Tab* on page 191 for Data Manager Usage Tab options.

User Guide Sample: Connection Refresh Button – XML Data Connection

This sample demonstrates a simple XML Data connection that is triggered by clicking a Connection Refresh Button. This sample also includes the Reset Button to clear the data retrieved, so that the connection can be refreshed.

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

1. Open or create an Xcelsius 2008 file that includes the data you want to use.
2. Open the **Data Manager** and add an **XML Data Connection**.
3. Enter the **URL** where the XML file is hosted. For this sample, use this URL:

   http://www.businessobjects.com/ipl/default.asp?destination=XcelsiusMarketplace

4. In the **MIME Type** dropdown menu, select **application/x-www-form-urlencoded**.
5. Check **Enable Load**.
6. Click the plus button to add a range.
7. Click the **Range** cell selector button and select a range of empty cells from the spreadsheet. For this sample, select the cells beneath column headers "Company" and "Quantity".
8. Place a Bar Chart component on the canvas.
9. Double-click the Bar Chart to open the Properties panel.
10. Click **Data by Series**; click the plus button to add a series to the list box.
11. Click the **Values (X)**

    cell selector button and select the data to be displayed. For this sample, select the cells beneath column header "Quantity".

12. Click the **Category Labels (Y)** cell selector button to select the cells in the spreadsheet that contain the labels; for this sample the cells under column header "Company".
13. Place a Connection Refresh Button component on the canvas.
14. Click the Connection Refresh Button to open its Properties panel.
15. In the **Label** box, type "Get Data".
16. In the Available Connections box, check the box next to the XML Data connection. This will enable the button to refresh the selected connection.
17. Place a Reset Button component on the canvas.
18. Click Preview to view the interaction between the Connection Refresh Button and Bar Chart components.

In this sample, the Bar Chart is populated with the data retrieved by the "Get Data" button (Connection Refresh Button). The Reset Button can be clicked to clear the data populating the Bar Chart.

User Guide Sample: XML Data (Advanced)

A polling application utilizes both send and load functionality. Votes must be sent to the server to be tallied and total results must be loaded from the server. There are five parts to such a procedure:

- *Part 1: To configure the XML Data Connection* on page 167

  Specify the server script that will communicate with the component.

- *Part 2: To send the data selection* on page 167

  Select the cells that will be sent to the server at run time.

- *Part 3: (Server-side) To receive data from the XML Data Connection* on page 168

  Develop the web script to receive and tally votes.

- *Part 4: To load the data selection* on page 171

  Select the cells that will be updated at run time from the server.

- *Part 5: (Server-Side) To send data to the XML Data Connection* on page 172

To open the User Guide Sample file:

1. Select **File > Samples**.
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

Part 1: To configure the XML Data Connection

To create applications that connect to external sources using the XML Data Connection, you must configure the connection and refresh options.

Each XML Data connection can communicate with a different external source. This source is specified by a URL on the Definition tab of the Data Manager. The URL must be available to the generated SWF application at run-time in order for the data to be sent and loaded correctly.

In this example, votes need to be tallied and up-to-date results displayed. We can accomplish this by communicating with a server script that interacts directly with a database. An ASP .NET script called addresults.aspx is used, but there are no restrictions on how the server script needs to be implemented.

To configure the XML data connection

1. In the Data Manager, add an XML Data Connection. If you have already added the connection, select it from the list to edit it.
2. In the **XML Data URL** box, enter the URL where your server script is hosted, or use the cell selector button to select the URL from the spreadsheet..
3. On the **Usage** tab, ensure that **Refresh On Load** and **Refresh Every** are *not* selected.

Part 2: To send the data selection

Users can vote on four separate categories using a series of sliders. By adding the cells that are tied to the sliders to the list of ranges to send, we can send the vote to the server.

To configure an Xcelsius 2008 visualization to send data to an external source

1. On the Definition tab, click **Enable Send**.
2. Click the add button ⊞.

   A new range is created.
3. In the **Name** box, type a name for the range.

   For this example, enter the name "Vote".

4. Click the **Range** cell selector button and select the range of cells to be sent to the external data source.

Part 3: (Server-side) To receive data from the XML Data Connection

The XML Data Connection sends specified ranges in a row-column structure. You can view the exact structure that will be sent to the server using the Preview XML button in the Send section. The server script should expect this XML structure.

The following example was developed to run on a Microsoft .NET web server. There are no restrictions on how the web query needs to be implemented.

The server script for the polling application has two functions. It must handle the data sent from the SWF and, return the updated totals for the poll.

In order to tally votes, the server-side script must examine the incoming XML data to extract the vote information. Using this information, the script can then record the vote by inserting it into a database.

The following files make up the server-side implementation of tallying the votes:

- SendPreview.xml.

  An XML file generated by Xcelsius 2008 with the Preview XML button of the Send section on the General tab of the Properties panel.

```
<data>
  <variable name="vote">
    <row>
      <column>1.0</column>
      <column>1.0</column>
      <column>1.0</column>
      <column>1.0</column>
    </row>
  </variable>
</data>
```

- addresults.aspx.

  A VB script that reads the XML data and adds the parsed vote to the database.

```
<%@ Page Language="VB" aspcompat=true Debug="true" vali
dateRequest="false" %>
<%@ Import Namespace="System.Data" %>
<%@ Import Namespace="System.Data.SqlClient" %>
```

```
<%

'Get XML that was send from SWF file
Dim sXMLString

dim item as String
For Each item In Request.Form
'Response.Write(item & " = " & Request.Form(item) & VbCrLf)
sXMLString = sXMLString & item & " = " & Request.Form(item)
Next

'Load XML into object
Dim oXML as Object
Dim oNodeList as Object
Dim oNode as Object

oXML = Server.CreateObject("MSXML2.DOMDocument")
oXML.async = False
oXML.validateOnParse = False

'Response.Write(sXMLString)
'Response.Write(oXML.loadXML(sXMLString))
oXML.loadXML(sXMLString)

'Use XPath to get the data
dim sPath as String
sPath = "/data/variable/row/column"
oNodeList = oXML.documentElement.selectNodes(sPath)

'Store data in an array
dim i, aVals(3)
i=0
For Each oNode in oNodeList
With oNode
' Just write the xml for that node to show you.
'Response.Write(.text + "<br>")
aVals(i)=.text
i=i+1
End With
Next

'Insert data into database
Dim sSQL as String ' String variable for building our query
Dim oCon as Object
dim oCmd as Object
dim sConnect as String

'Define insert statement
sSQL = "INSERT INTO ComdexPoll (Booth, Staff, Demos, Buy)
VALUES (" & aVals(0) & ", " & aVals(1) & ", " & aVals(2) &
", " & aVals(3) & ")"
```

```
'Create connection object
sConnect = "Provider=SQLOLEDB;Data Source=yourdb;Initial
Catalog=yourdb;User Id=user;Password=password;"
oCon = Server.CreateObject("ADODB.Connection")
oCon.ConnectionString = sConnect
oCon.Open

'Create command object
oCmd = Server.CreateObject("ADODB.Command")
oCmd.ActiveConnection = oCon
oCmd.CommandText = sSQL

'Execute the command to insert the data
oCmd.Execute()

'Select new totals from the database
dim oRst as Object
oRst = Server.CreateObject("ADODB.RecordSet")
oRst.ActiveConnection = oCon
sSql = "select Sum(Booth) as Booth, Sum(Staff) as Staff,
Sum(Demos) as Demos, Sum(Buy) as Buy, Count(ID) as TotalRecs
 from comdexpoll"
oRst.Open(sSql)

'Build XML data to return
dim sXML as String
sXML = "<data>"

'totalData
sXML = sXML & "<variable name=" + chr(34) + "totalData" +
chr(34) + ">"
sXML = sXML & "<row>"
sXML = sXML & "<column>" & oRst("Booth").value & "</column>"
sXML = sXML & "<column>" & oRst("Staff").value & "</column>"
sXML = sXML & "<column>" & oRst("Demos").value & "</column>"
sXML = sXML & "<column>" & oRst("Buy").value & "</column>"
sXML = sXML & "</row>"
sXML = sXML & "</variable>"

'totalEntries
sXML = sXML & "<variable name=" + chr(34) + "totalEntries"
+ chr(34) + ">"
sXML = sXML & "<row>"
sXML = sXML & "<column>" & oRst("TotalRecs").value &
"</column>"
sXML = sXML & "</row>"
sXML = sXML & "</variable>"

'userDefaults
sXML = sXML & "<variable name=" + chr(34) + "userDefaults"
+ chr(34) + ">"
sXML = sXML & "<row>"
```

```
sXML = sXML & "<column>5</column>"
sXML = sXML & "<column>5</column>"
sXML = sXML & "<column>5</column>"
sXML = sXML & "<column>5</column>"
sXML = sXML & "</row>"
sXML = sXML & "</variable>"

'close out the XML data string
sXML = sXML & "</data>"

'Now write the data out so that it gets returned
Response.Write(sXML)

'Cleanup connection vars
oRst.close
oRst = Nothing
oCmd = Nothing
oCon.close
oCon = Nothing

%>
```

Part 4: To load the data selection

To configure an Xcelsius 2008 visualization to refresh data from an external source

1. On the **Definition** tab, click **Enable Load**.
2. Click the Add button ⊞.

   A new range is created.
3. In the **Name** box, type a name for the range.

   For this example, enter the name "totalData".
4. Click the **Range** cell selector button and select the range of cells to be refreshed.
5. Repeat steps 3-5 to create "totalEntries" and "userDefaults" ranges.
6. Set up the external data source to return the XML.

   You can create an XML file and manually update it as needed or write a server script that queries a database and translates the results into XML. Choose an implementation that suits your specific needs.

First configure the XML Data button to enable loading from the external data source.

Part 5: (Server-Side) To send data to the XML Data Connection

The XML Data Connection expects to receive XML data in the same row-column format that it uses to send range data. You can view the exact structure that the connection is expecting by pressing the Preview XML button in the Load area.

The following example was developed to run on a Microsoft .NET web server. There are no restrictions on how the web query needs to be implemented.

The server script for our polling application has two functions. It must handle the data sent from the SWF and return the updated totals for the poll.

To refresh the polling application with the latest results, the server-side script queries a database to pull the most up-to-date data. The script then converts the data into the XML structure that the XML Data Connection is expecting. The XML is sent back to the connection where it is converted into data and used to update the visualization.

The following files make up the server-side implementation of tallying the votes:

- LoadPreview.xml

  An XML file generated by Xcelsius 2008 with the Preview XML button of the Load area on the Definition tab of the Properties panel of the component.

```
<data>
  <variable name="totalData">
    <row>
      <column>5</column>
      <column>10</column>
      <column>3</column>
      <column>5</column>
    </row>
  </variable>
  <variable name="totalEntries">
    <row>
      <column>10.0</column>
    </row>
  </variable>
  <variable name="userDefaults">
    <row>
      <column>1.0</column>
      <column>1.0</column>
      <column>1.0</column>
      <column>1.0</column>
    </row>
```

```
  </variable>
</data>
```

- addresults.aspx

  A VB script that reads the XML data and reads the new data.

```
<%@ Page Language="VB" aspcompat=true Debug="true" vali
dateRequest="false" %>
<%@ Import Namespace="System.Data" %>
<%@ Import Namespace="System.Data.SqlClient" %>

<%

'Get XML that was send from SWF file
Dim sXMLString

dim item as String
For Each item In Request.Form
'Response.Write(item & " = " & Request.Form(item) & VbCrLf)
sXMLString = sXMLString & item & " = " & Request.Form(item)
Next

'Load XML into object
Dim oXML as Object
Dim oNodeList as Object
Dim oNode as Object

oXML = Server.CreateObject("MSXML2.DOMDocument")
oXML.async = False
oXML.validateOnParse = False

'Response.Write(sXMLString)
'Response.Write(oXML.loadXML(sXMLString))
oXML.loadXML(sXMLString)

'Use XPath to get the data
dim sPath as String
sPath = "/data/variable/row/column"
oNodeList = oXML.documentElement.selectNodes(sPath)

'Store data in an array
dim i, aVals(3)
i=0
For Each oNode in oNodeList
With oNode
' Just write the xml for that node to show you.
'Response.Write(.text + "<br>")
aVals(i)=.text
i=i+1
End With
Next
```

```
'Insert data into database
Dim sSQL as String ' String variable for building our query
Dim oCon as Object
dim oCmd as Object
dim sConnect as String

'Define insert statement
sSQL = "INSERT INTO ComdexPoll (Booth, Staff, Demos, Buy)
VALUES (" & aVals(0) & ", " & aVals(1) & ", " & aVals(2) &
", " & aVals(3) & ")"

'Create connection object
sConnect = "Provider=SQLOLEDB;Data Source=yourdb;Initial
Catalog=yourdb;User Id=user;Password=password;"
oCon = Server.CreateObject("ADODB.Connection")
oCon.ConnectionString = sConnect
oCon.Open

'Create command object
oCmd = Server.CreateObject("ADODB.Command")
oCmd.ActiveConnection = oCon
oCmd.CommandText = sSQL

'Execute the command to insert the data
oCmd.Execute()

'Select new totals from the database
dim oRst as Object
oRst = Server.CreateObject("ADODB.RecordSet")
oRst.ActiveConnection = oCon
sSql = "select Sum(Booth) as Booth, Sum(Staff) as Staff,
Sum(Demos) as Demos, Sum(Buy) as Buy, Count(ID) as TotalRecs
 from comdexpoll"
oRst.Open(sSql)

'Build XML data to return
dim sXML as String
sXML = "<data>"

'totalData
sXML = sXML & "<variable name=" + chr(34) + "totalData" +
chr(34) + ">"
sXML = sXML & "<row>"
sXML = sXML & "<column>" & oRst("Booth").value & "</column>"
sXML = sXML & "<column>" & oRst("Staff").value & "</column>"
sXML = sXML & "<column>" & oRst("Demos").value & "</column>"
sXML = sXML & "<column>" & oRst("Buy").value & "</column>"
sXML = sXML & "</row>"
sXML = sXML & "</variable>"

'totalEntries
```

```
sXML = sXML & "<variable name=" + chr(34) + "totalEntries"
+ chr(34) + ">"
sXML = sXML & "<row>"
sXML = sXML & "<column>" & oRst("TotalRecs").value &
"</column>"
sXML = sXML & "</row>"
sXML = sXML & "</variable>"

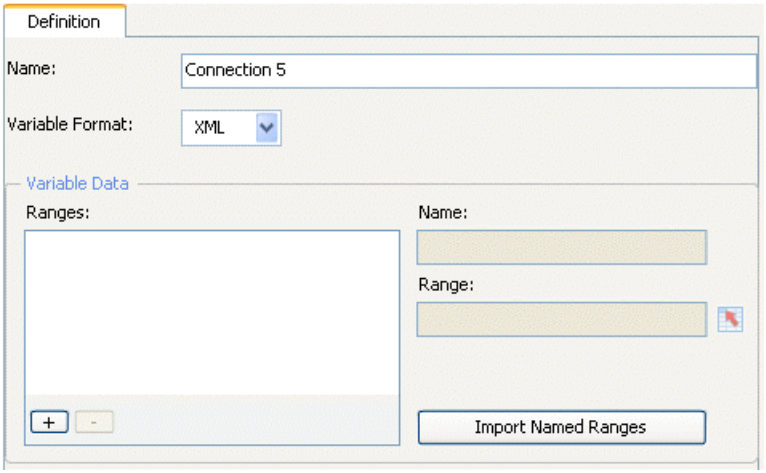
'userDefaults
sXML = sXML & "<variable name=" + chr(34) + "userDefaults"
+ chr(34) + ">"
sXML = sXML & "<row>"
sXML = sXML & "<column>5</column>"
sXML = sXML & "<column>5</column>"
sXML = sXML & "<column>5</column>"
sXML = sXML & "<column>5</column>"
sXML = sXML & "</row>"
sXML = sXML & "</variable>"

'close out the XML data string
sXML = sXML & "</data>"

'Now write the data out so that it gets returned
Response.Write(sXML)

'Cleanup connection vars
oRst.close
oRst = Nothing
oCmd = Nothing
oCon.close
oCon = Nothing
%>
```

Configuring Flash Variables connections



Add or edit the following connection parameters for Flash Variables Connections:

Definition Tab

- Name

  Type a name for the connection.

- Variable Format

  Select XML or CSV format data to send to the SWF file.

- Variable Data

  The **Name** and **Range** parameters apply to the range that is highlighted in the Ranges list box.

  - Ranges List Box

    Select a range in the list box to edit the data for that range.

  - Add

    Use the Add button ⊞ to add a new range to receive return XML.

  - Remove

Use the Remove button to delete the highlighted range from the list.

- Name

  Type a name for the selected range or use the cell selector button to link to a cell in the spreadsheet..

- Range

  Click the Range cell selector button to select a range from the spreadsheet.

- Import Named Ranges button

  Use this button to import named ranges from the spreadsheet.

User Guide Sample: Flash Variables connection

With the Flash Variables connection, you can pass data directly to a SWF file that is hosted in an HTML page. This data is passed to the visualization before the SWF file loads and lets you initialize your visualization with any data that is passed in by this method.

Note: This functionality utilizes the FlashVars property of the Adobe Flash Player. For more information on this functionality please see the "Using FlashVars to pass variables to a SWF" TechNote on the Adobe web site.

The sample visualization below lists stock market data for several companies and displays the latest stock data when the file is viewed as a web page.

To open the User Guide Sample file:

1. Select **File > Samples**
2. Select the User Guide Samples category.
3. Select the file name in the Items section.

The Sample file will contain all components and the corresponding spreadsheet data. To follow along with the step-by-step instructions, open the Sample file and then delete the components. These instructions will produce a working visualization that will demonstrate the use of a component or feature; additional settings, formats, or components may have been added to enhance the appearance of the sample visualization.

The completed sample XLF file with embedded spreadsheet data and SWF file for this visualization can be located by navigating to the following location:

C:\Program Files\Business Objects\Xcelsius\assets\samples\User Guide Samples

Also included in this directory is the HTML file of the final visualization.

Step 1: To configure the visualization

1. Create an Xcelsius 2008 visualization to display stock data.
2. Open the Data Manager, click Add, and select Flash Variables connection.
3. In the Name box, type a name for the range.

   For this example, type "Flash Variable example".
4. On the Variable Format drop-down menu, select CSV.

   For this example, selecting CSV will pass comma separated data to the SWF file.
5. In the Variable Data area, add a Range by clicking the plus button.
6. Select the added range in the Ranges list box.
7. In the Variable Data Name box, type a name for the range.

   For this example, type "StockData".
8. In the Variable Data Range box, use the cell selector button to select the range of cells to be replaced from the spreadsheet.

   For this example, the range of cells should contain the stock data.
9. Click the Close button to exit the Data Manager.

Step 2: To export the visualization

1. On the File menu, point to Export and click HTML.
2. Enter a name for the HTML file, and click Save.

   For this example, name the file "Stocks.html".

   Note: Export to HTML generates an HTML file and a SWF file of the same name in the specified location.
3. Open Stocks.html with an HTML editing program such as Microsoft Notepad.

4. Find the specified line of code:
   - Internet Explorer

     ```
     <PARAM NAME=FlashVars
     VALUE="StockData=Widget%20Maker%20Inc.%2C33.50...
     ```

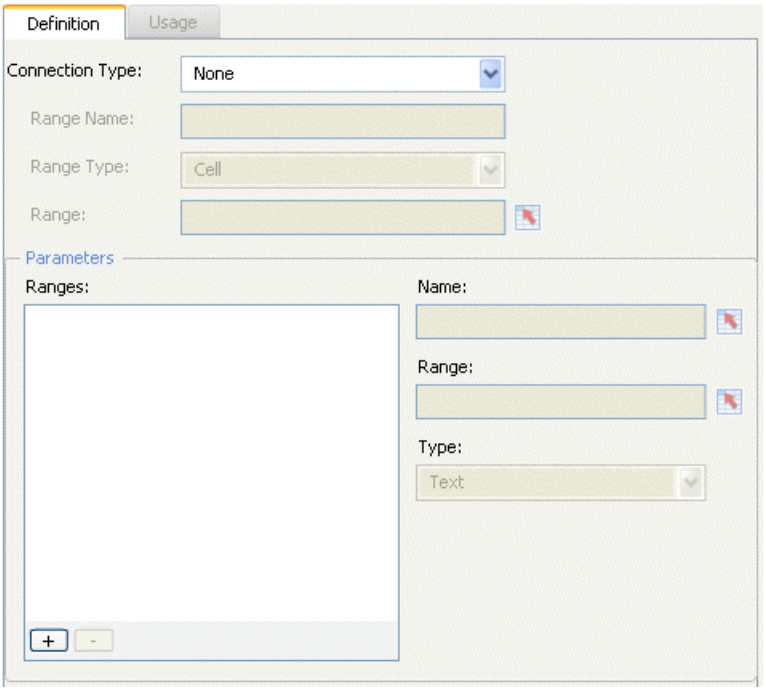
   - Netscape/Mozilla

     ```
      <EMBED src="Stocks.swf" quality=high
     bgcolor=#FFFFFF WIDTH="452" HEIGHT="355" FlashVars="Stock
     Data=Widget%20Maker%20Inc.%2C33.50...
     ```

5. Change the first value (33.50) to 99.50.
6. Save Stocks.html
7. Open Stocks.html with your web browser.

The value change is reflected in Stocks.html.

Configuring Portal Data



The Portal Data Connection includes three connection types:

- None (Parameter)
- Consumer
- Provider

These connections are added to a visualization that needs to have parameters defined or that needs to pass or receive data from another web part.

Portal without connection

Portal without visualization allows visualization designers to define parameters that they want the user to customize from within a portal. Different users may want to see the data in different ways.

There are three important selections selections in the Parameter section:

- Name

  Name is user-defined and will be displayed for the visualization in the property dialog box in Sharepoint. Name is required or the parameter will not be listed as a parameter in Sharepoint.

  Type a name or use the cell selector button to link to a cell in the spreadsheet.

- Range

  Range is the area in the spreadsheet where the parameters are set.

  Select the range by using the cell selector button to link to a range in the spreadsheet.

- Type

  Type sets the type of parameter. The parameter can be Text, Number, Check Box, Date, or List Box.

  - Text is used to set any text based data within the XLF. For example, chart titles.
  - Number is used to set any numeric based data. For example, alert levels.
  - Check Box is useful for toggling the value of a cell between zero and one. It can be used for showing or hiding components using Dynamic Visibility.
  - Date is used to define a date in the XLF. It sets the format to Date and uses a true date value within the XLF. For example, this type can be used to set date ranges for data access or for amount of data to display.
  - List Box enables the designer to build user selection options into the parameters. When List Box is selected, two more options become available.
    - Entries

      Entries is used to set what entries are available for the user to select.

    - Default Selection

Default Selection is used for selecting which entry's value will be used by default if the user does not make a selection.

The List Box Type allows the designer to specify set values that can be selected by the user. Text, Number, Check Box, and Date allow the user to enter any value into the parameter. If the value they enter is not compatible with the visualization, the correct behavior will not occur. The List Box type eliminates this issue because the user must select from values the designer provides.

Portal Consumer Connection

The Portal Consumer connection should be added to any visualization that will accept data from a web part within the portal. In addition to the Parameters, there are three important selections to configure on the Properties panel of the Consumer connection: Range Name, Range Type, and Range.

- Range Name

  Range Name is user-defined and is displayed when connecting web parts together in Portals. Range Name is required or the web parts cannot be connected together.

- Range Type

  Range Type defines the amount of data that will be passed. Cell consumes a single cell from another web part. Row is a single row with multiple columns. Table is multiple rows and columns. If another visualization is passing in data, the most likely type to select is Cell or Row. Table is used to pass data from a Portal list.

- Range

  Range is the area on the internal spreadsheet of the visualization that the incoming data will be written to.

Portal Provider Connection

The Portal Provider Connection should be added to any visualization that will provide data to another web part. In this case only Xcelsius 2008 Portal

web parts can be used to consume information from a visualization that is using the Portal Provider connection.

The Portal Provider contains the same options as the Portal Consumer connection. See above for details about these three options.

Usage Tab

The Usage Tab for the Portal Data connection is only available with Portal Provider type connections.

See *Usage Tab* on page 191 for more information.

Configuring Crystal Report Data Consumer Connections



Add or edit the following connection parameters for Crystal Report Data Consumer Connections:

Definition Tab

- Row Headers

  Use the Cell Selector button to select a row header in the spreadsheet.

- Column Headers

Use the Cell Selector button to select a column header in the spreadsheet.

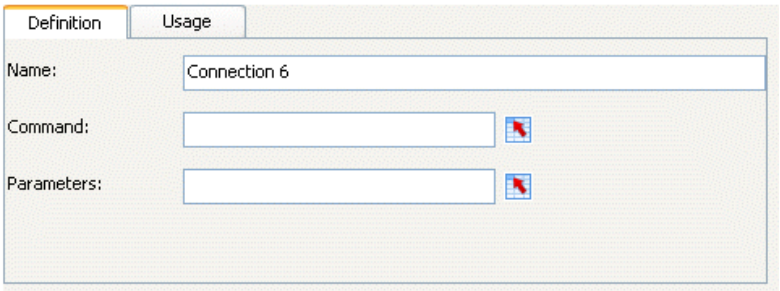
- Data

  Use the Cell Selector button to select a data range in the spreadsheet.

- Description

  Type a description for the Data Connection that will be saved with the file.

Configuring FS Command Connections



For detailed information about FS Command, see the Adobe Flash support site at *http://www.adobe.com/support/flash/action_scripts/actionscript_dictionary/actionscript_dictionary372.html*

Definition Tab

- Name

  Type a name for the connection.

- Command

  Use the Command field to type a command for the FS Command, or click the Cell Selector button and select a command in the spreadsheet.

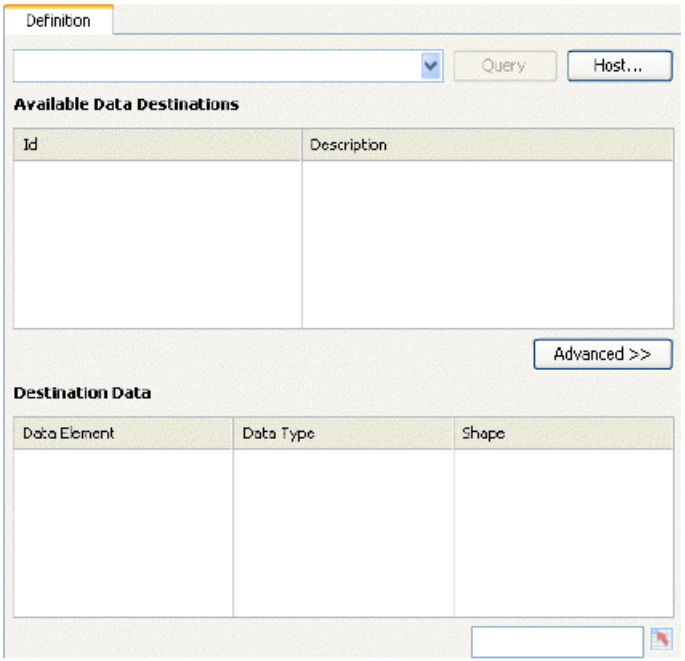
- Parameters

  Use the Parameter field to type a parameter value for the FS Command, or click the Cell Selector button and select a value in the spreadsheet.

Usage Tab

See *Usage Tab* on page 191 for details on the Data Manager usage configurations.

Configuring LCDS connections



LiveCycle Data Services, a component of Adobe LiveCycle Enterprise Suite software, provides up-to-second views of your business data via dashboards connected to Adobe LiveCycle Data Services. The LCDS connection streams real-time data into interactive visualizations, animated charts and graphs, financial presentations, or business calculators, delivering meaningful information in a visually engaging way.

Add or edit the following connection parameters for Live Cycle Data Services (LCDS) connections:

Definition tab

- Dropdown menu

Select the LCDS host connection to be associated with this connection. If no hosts are listed, click the Host button to add a new host.

- Host button

  Click the Host button to launch the Edit a Host dialog box.
  - Name

    Type a name for this LCDS host.
  - URL

    Type the URL to the LCDS server to connect to.

    Basic structure:

    ```
    http://<server name>:<port>/<LCDS context path>/xcelsius
    ```

    e.g.

    ```
    http://localhost:8700/flex/xcelsius
    ```

  Click OK to add the Host and return to the Data Manager
- Query button

  Click on the Query button to retrieve information on what feed destinations are available from the LCDS host selected in the dropdown menu.
- Available Data Destinations

  Select one of the available feed destinations to bind to the CX model.
  - Id:

    The Id of the LCDS feed destination.
  - Description:

    The description of the feed destination.
- Advanced button

  Click the Advanced button to expand the settings available for the selected feed destination.
  - Id:

    The Id of the LCDS feed destination.
  - Channel Type:

The type of channel (or communication protocol) that is being used.

- Channel URL:

  The URL associated with the selected feed destination.

- Destination Data

  This section lists the Data Elements available from the selected Host. Select a Data Element, and then click the cell selector button on the bottom right to select a range in your spreadsheet.

  - Data Element:

    The data element(s) that are being returned by the feed destination.

- * Data Type:

  The data type of the element:

  - Number
  - Txt
  - True/False (Boolean)

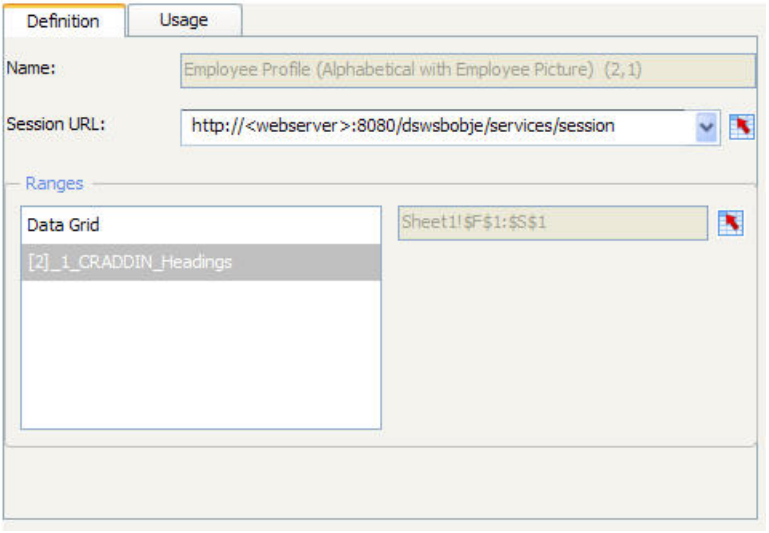
- Shape:

  Describes the shape or structure of the data that is returned for this element:

  - Singleton (single value)
  - 1D (a column or row of values)

- 2D (a table of values)

Configuring LiveOffice Connections



Edit the following connection parameters for LiveOffice:

Note: This Data Connection is only available in BusinessObjects Xcelsius Enterprise.

Note: The Range option of the Live Office connector does not control how many columns are returned in an XLF file. This option controls only how many rows of data are returned. This behavior is by design.

LiveOffice Web Services URL

Use this field to enter the location of the Live Office Web Services that the visualization will use to connect to Live Office data.

LiveOffice Connections

- Views

The Views area lists the Live Office Views that are used as data sources in the XLF file.

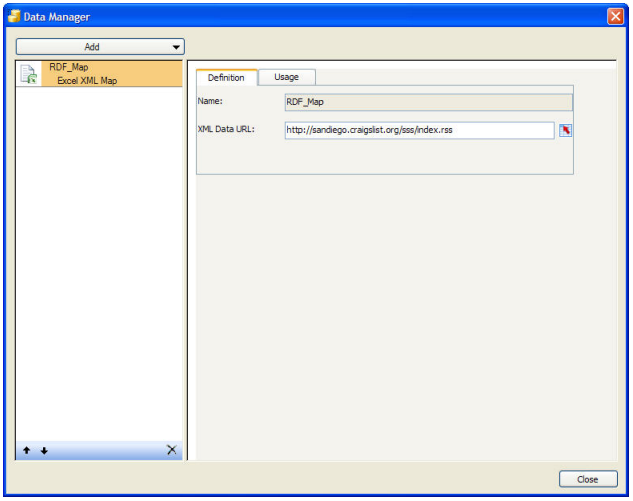
- Ranges

  The Ranges area lists the Excel ranges that can be selected for refresh in the XLF file. The ranges are split into headings and data grid.

  Click the Cell Selector button below the Ranges area to select a different range of cells to refresh.

For more information about using LiveOffice connections, see *Using LiveOffice data for Xcelsius 2008 visualizations* on page 202.

Configuring Excel XML Maps Connections



Xcelsius 2008 supports the XML functionality that was introduced in Excel 2003. Excel supports the ability to embed XML documents and schemas into a spreadsheet. These files can be imported in Xcelsius 2008; the Xcelsius 2008 SWF files will retain the link to the XML source generated.

Note: Data that has been mapped using the Excel mapping functionality can be manually refreshed by using a Connection Refresh button in your visualization.

Note: If a Dynamic URL is used with the XML Map feature and an interval refresh, it must be bound to an Excel cell that contains a formula.

Building the visualization

After the Excel file has been set up, the next step is to build your visualization and configure the XML Map Options.

For information on setting up the Excel file with an XML map, refer to the on-line help in Microsoft Excel.

Name

The Name field displays the name of the XML Map. This field cannot be updated.

XML Data URL

The XML Data URL provides the URL of the data's external location. The location can be edited by typing or using the cell selector button to select a cell with the new URL.

Sample visualization: Excel spreadsheet with an XML map

This sample creates a visualization that lists stock market quotes for several companies based on data in an XML file. After the data has been imported into an Excel file you can use Xcelsius 2008 to build a visualization that retains the link to the XML data source. This means that changes to the XML file will be reflected in the exported SWF file.

This visualization will display share price information for several companies. The stock information is contained in an XML file that has been imported into the Excel file and mapped to a range of cells. A Spreadsheet Table component has been bound to the range of cells to display the data.

To open the User guide Sample file:

1. Select **File > Samples**.

2. Select the User Guide Samples category.
3. Select the file name in the Items section.

Also included in this directory is the HTML file of the final visualization.

1. Import an Excel file with XML mapped data.
2. Place a Spreadsheet Table component on the canvas.
3. Double-click the Spreadsheet Table to open the Properties panel.
4. Click the **Display Data** cell selector button.
5. Select the range of data in the spreadsheet, and click OK.
6. Open the **Data Manager**, click the **Add** button; select **Excel XML Maps** connection.

   The connection parameters will be filled in per the existing connection's parameters.

7. Export the visualization to an HTML file.

   Note: Xcelsius 2008 generates the HTML file and a SWF file with the same name and saves them in the selected directory. These files must be kept together in order for the HTML file to work properly.

Once the visualization has been exported, you can open the HTML file in your web browser. Changes made to the source XML file will be reflected in your HTML file.

Usage Tab

The Usage Tab contains the Refresh and Load Status options.

Refresh Options

- Refresh On Load

  Use this option to refresh the data when the visualization loads.

- Refresh Every

  Use this option to automatically refresh the XML data. Enter the interval value, then select a time unit (minutes, seconds, etc.) from the drop-down menu.

- Refresh on Trigger

Use this option to select a cell that will trigger the visualization to refresh the data. Use the Cell Selector to select the spreadsheet cell that will define the Trigger Cell, then set the trigger options:

- **When Cell Updates**. This option triggers a refresh when the Trigger Cell is updated, even if the value of the cell does not change.
- **When Value Changes**. This option triggers a refresh when the value in the Trigger Cell changes.
- **When Value Equals**. This option triggers a refresh when the value in the Trigger Cell equals the target value. Type a target value, or use the cell selector to link to a spreadsheet cell that contains the trigger value.

Load Status

- Loading Message

  Use this option to specify a message that is displayed while the visualization is loading. Type your message in the entry field, or use the cell selector to link to a cell in the spreadsheet.

- Idle Message

  Use this option to specify a message that is displayed while the visualization is idle. Type your message in the entry field, or use the cell selector to link to a cell in the spreadsheet.

- Insert In

  Use the cell selector button to select the spreadsheet cell that Loading and Idle Messages will be inserted into.

- Enable Load Cursor

  Use this to display the cursor while the data is loading.

- Disable Mouse Input on Load

  Use this to disable mouse input while the data is loading.

Using Advanced Features in Xcelsius Engage Server

chapter 10

Xcelsius 2008 Integration with SQL Server Reporting Services

Xcelsius 2008 and SQL Server Reporting Services

Xcelsius 2008 uses Xcelsius Reporting Services (XRS) to dynamically populate Xcelsius 2008 visualizations based on SQL Server Reporting Services (RS) data. XRS allows users to connect to an RS report through the Xcelsius 2008 interface and to create visualizations that can easily be updated.

Xcelsius 2008 Reporting Services server

You can perform the following tasks within the Reporting Services (RS) server:

- Configure reports and how they run.
- Set user security and viewing rights.
- Configure caching and scheduling for reports

Note: You can only do this is you have administrative rights.

The `Web.config` file located at `<drive>:\inetpub\wwwroot\xrs` is where this server configuration occurs. The most important section of this file, where the configuration takes place, is shown here.

```
<appSettings>
  <add key="ReportingServicesUrl" value="http://xrsdemo-sd/Re
portServer" />
  <add key="ReportServerUrl" value="http://xrsdemo-sd/Reports"
 />
  <add key="XrsServicesUrl" value="http://xrsdemo-sd/xrs" />
</appSettings>
```

Xcelsius 2008 Portal Integration

Xcelsius 2008 for Portals

Xcelsius 2008 support for portals enables you to create dashboards within the portal environment. Portal integration supports Sharepoint and Websphere. Administrators can provide complex visualizations or simple Xcelsius 2008 components that can be customized by users.

Xcelsius 2008 supports the following Portal scenarios:

- Visualizations can be connected to Sharepoint lists.
- Visualizations can communicate with one another. This scenario is useful for what-if analyses or drill-downs.
- Users can customize their visualizations, such as the data, components, alert levels, date ranges, and default parameters that will be used.

For more information about integration with Websphere, see the documentation included in the Xcelsius 2008 installation CD.

Deploying Xcelsius 2008 Visualizations to Microsoft Sharepoint

Xcelsius 2008 for Sharepoint server

Xcelsius 2008 for Sharepoint server (XSP) installs a web part container into the Sharepoint web part library. After installation and configuration, the web part container can be added to the Web Part Gallery within Sharepoint and any user with the appropriate rights can add the web part container to a page within the site.

Deploying visualizations in Sharepoint

This section outlines the steps required to deploy Xcelsius 2008 visualizations in Sharepoint

Step 1: Add Xcelsius 2008 to a Sharepoint web page

1. Navigate to the web page that the visualization will reside in.
2. Go to **Modify Shared Page** > **Add Web Parts** > **Browse** to open the Web Part Gallery.
3. Locate the Xcelsius 2008 Sharepoint Connector and drag it to the location on the page where the visualization will reside.

Step 2: Configure the Xcelsius 2008 Sharepoint web part

1. Click the down arrow on the Xcelsius 2008 Sharepoint Connector, then click **Modify Shared Web Part**.

   The Properties dialog box opens. The property used during this initial configuration is Xcelsius 2008 Visualization Source.

2. Import the visualization that you are configuring.

   To populate the web part with a visualization, that visualization should already be imported into the Sharepoint library of documents. It is usually best to create a document list for all visualizations so they can be accessed from the same location.

3. Click the link to open the imported visualization and find its exact URL.
4. Copy the URL into the **Xcelsius 2008 Visualization Source** field on the Web Part properties dialog box and click **Apply**.

   The visualization appears in the web part on the page. If there are any parameters defined in the visualization, they appear on the Property dialog box below the Width parameter. These parameters can be set at anytime by navigating to the property dialog box, setting the parameters and clicking Apply.

Note: Parameters can be of 5 types, Text, Numeric, Check Box, Date, and List Box. They can be used to set the value of any cell within the visualization. More information about parameters can be found in the description of the Sharepoint Parameter component in the XSP client section.

Step 3: Connect the web part to other web parts

When in modify Shared web part mode the user can also connect the visualization to other visualizations or to other web parts that can pass it data, such as a Sharepoint List.

1. Click the down arrow on the Xcelsius 2008 Sharepoint Connector then click **Modify Shared Web Part**.
2. Click the down arrow on the web part then click **Connections**.

   If Connections is unavailable, the visualization was not configured to connect to another web part.

   If Connections is available, after you click it you will see options such as Consume Row, Send Value, Get Value, and Send list. This means that the visualization is configured to either send information to another web part (Provider) or receive information from another web part (Consumer). These options are discussed in more detail in the Sharepoint Consumer and Sharepoint Provider component sections of this chapter.
3. If a visualization has been configured to receive a value from another visualization, add both visualizations to the page.
4. Click the down arrow on the web part then click **Connections**.
5. Click **Get value from** and select the other Xcelsius 2008 Sharepoint Web Part.

   The two visualizations are now connected.

These connections can be configured in many ways to allow for What-If analysis, drilling down to more detailed data, or to allow a user interaction in one visualization to affect other visualizations.

Note: Xcelsius 2008 visualizations support consumer and provider connections, but are limited to either a single consumer connection or a single provider connection.

Using Advanced Features in BusinessObjects Xcelsius Enterprise

chapter 11

Business Objects Platform Integration

Overview

BusinessObjects Xcelsius Enterprise enables you to create interactive presentations from managed Enterprise data. Using the LiveOffice connections in BusinessObjects Xcelsius Enterprise and the Live Office Web Services in BusinessObjects Enterprise XI Release 2 (XI R2) or Crystal Reports Server XI R2, you can create and refresh visualizations against managed Enterprise data.

This chapter discusses how to use Excel spreadsheets built with LiveOffice as data sources for Xcelsius 2008 files. It also discusses how to manage Xcelsius 2008 XLF files and SWF files in BusinessObjects Enterprise or Crystal Reports Server.

Note:

- The functionality discussed in this chapter is only supported in BusinessObjects Enterprise XI R2 and Crystal Reports Server XI R2.
- Single Sign-on is not supported in this release.
- This document assumes working knowledge of LiveOffice and BusinessObjects Enterprise or Crystal Reports Server.

Terms used in this document

There are terms used in this document that you may not be familiar with. Look at this list to see what these terms refer to.

- XLF

  This is an Xcelsius 2008 design file. It is the file that is created by Xcelsius 2008 and is where all the functionality of the visualization is configured.

- SWF

  This is an Adobe Flash file. Xcelsius 2008 uses Adobe Flash to render interactive files.

- Xcelsius 2008 Visualization

This term is used for the final output of an Xcelsius 2008 file. For example, when you create a file in Xcelsius 2008 and export it to PowerPoint, the PowerPoint file is an Xcelsius 2008 Visualization.

- LiveOffice-enabled

  This term is used to describe an Excel spreadsheet that is created with LiveOffice as the data source.

Moving from an unmanaged environment to a managed environment

If you have upgraded from the Crystal Vision bundle, you likely have LiveOffice report views that are based on unmanaged Crystal Reports. To take advantage of the refresh capabilities of the LiveOffice connections in Xcelsius 2008 and the viewing and distribution capabilities of BusinessObjects Enterprise or Crystal Reports Server, you must move to managed files. You can publish your unmanaged Crystal Report to BusinessObjects Enterprise or Crystal Reports Server and then update your visualizations to take advantage of the functionality available in Xcelsius 2008.

This section outlines the steps to move from an unmanaged environment to a managed environment. It does not describe each step in detail but instead gives an overview of the workflow involved. For detailed information on how to perform each step, referred to the appropriate product guide.

To move to a managed system

1. Publish your unmanaged Crystal Reports to Crystal Reports Server or BusinessObjects Enterprise.

   For detailed information about how to publish reports, refer to the chapter "Publishing Reports to Crystal Reports Server" in the Crystal Reports Server XI Release 2 Installation Guide or the chapter "Publishing Objects to BusinessObjects Enterprise" in the BusinessObjects Enterprise XI Administrator's Guide.

2. In Live Office, set the location of the report view that you want to update to be managed. Set this location to the location of it's new managed report source.

For detailed information about how to set the location of a Live Office report view, refer to the chapter "Creating Report Views from Unmanaged Reports" in the Live Office User Guide.

3. Open the XLF that you want to modify with the updated report view.
4. In the Data Manager, add and configure a LiveOffice connection to the XLF.

   For detailed information about how to do this, see *Creating an Xcelsius 2008 visualization from a LiveOffice- enabled Excel spreadsheet* on page 202. Specifically refer to the procedure called "To make the Xcelsius 2008 file refreshable".

5. Save the XLF file to your Enterprise system or export a SWF file to your Enterprise system.

   For detailed information about how to do this, see *Storing Xcelsius 2008 files in Crystal Reports Server or BusinessObjects Enterprise* on page 205.

Using LiveOffice data for Xcelsius 2008 visualizations

With Xcelsius 2008, you can create Xcelsius 2008 XLF files and SWF (Adobe Flash files) using Excel spreadsheets constructed from managed Crystal Reports or Web Intelligence data.

The LiveOffice Web Services in Crystal Reports Server and BusinessObjects Enterprise enables you to refresh Xcelsius 2008 SWF files and Xcelsius 2008 Visualizations from within InfoView. The BusinessObjects Enterprise Web Services enables you to refresh the data from outside InfoView, as long as you can connect to your Crystal Reports Server or BusinessObjects Enterprise system.

Depending on the data that is contained in the Excel spreadsheet, you can perform a variety of tasks in Xcelsius 2008 that allow you to interact with Enterprise data.

Creating an Xcelsius 2008 visualization from a LiveOffice-enabled Excel spreadsheet

You can create an Xcelsius 2008 Visualization using data in a LiveOffice-enabled Excel spreadsheet. LiveOffice-enabled means that the

data in the spreadsheet is actually a View created from either managed Crystal Reports or managed Web Intelligence documents.

After you have imported a LiveOffice-enabled file into Xcelsius 2008, you can also make it refreshable against the source data by configuring the LiveOffice connection in the Xcelsius 2008 Data Manager.

Note: The following procedures assume a working knowledge of LiveOffice.

To create an Xcelsius 2008 Visualization using LiveOffice

1. Import an Excel spreadsheet that contains LiveOffice data.
2. Open the Data Manager and click **Add**.

   A list of connection types appears.
3. Select LiveOffice connections.
4. Configure each of the LiveOffice views.
5. Select the refresh options on the Usage Tab in the Data Manager.

To make the Xcelsius 2008 file refreshable

1. Open the Data Manager and select the LiveOffice connection you want to refresh. .
2. On the **Definition** tab, type the URL into the Live Office Web Services URL field.

   The default URL listed in the field is:

   http://<webserver>:8080/dswsbobje/services/session

   If your BusinessObjects Enterprise or Crystal Reports Server has a default Web Services installation, replace <webserver> in the default URL with the name of your CMC to correctly complete the URL.

   The URL is cached so that you do not have to type it in each time you configure the LiveOffice connection.
3. On the **Definition** tab, click the View that you want the LiveOffice connection to refresh against.

   Note:

   - If your Excel spreadsheet contains more than one View, you can choose one, some, or all of the Views listed in the Views area of the Definition tab. Only the data from the Views you choose will be refreshed when the Xcelsius 2008 file is refreshed.

- You can increase the range of cells that your Xcelsius 2008 visualization is able to accommodate so that if the data grows, your Xcelsius 2008 visualization will continue to analyze the full data set properly.

In the Ranges area of the Definition tab, you will see the cell ranges that have been imported for the selected view.

To increase the original range that you selected:

a. Click the range that you want to adjust.
b. Click the cell selector button under the Ranges area.
c. Select a new range from your spreadsheet and click **OK**.

   The new cell range is reflected in the field next to the cell selector button.

4. On the **Usage** tab, set the refresh options you want.
   - Refresh on Load automatically refreshes the data whenever you open the file.
   - Refresh on Interval automatically refreshes on the time interval you specify. The time is measured in seconds.
   - If you do not select either of these options, the refresh will be manual. You will need to add and configure a Connection Refresh button to the visualization, which the end user can click to refresh the connection.

5. Export your XLF file to any format you choose.

Depending on what option you chose in step 4, the Xcelsius 2008 Visualization will be refreshed when you open it, when you click the Connection Refresh Button, or at the set time interval.

Note: You can set additional refresh options with a Connection Refresh Button. See *Web Connectivity Components Reference* on page 339 for more information.

Passing parameters from Xcelsius 2008 to LiveOffice

You can pass parameter values from an Xcelsius 2008 visualization or SWF file to LiveOffice by taking advantage of Xcelsius 2008's ability to pass values to an Excel spreadsheet. This way, you can input parameter values in your visualization and have the correct data returned from the data source.

To pass a parameter to LiveOffice

Note: This procedure requires a LiveOffice-enabled Excel spreadsheet with a bound parameter. The spreadsheet must require user input for the parameter when it is refreshed.

1. Place a Single Value component such as a dial or a slider on the canvas.
2. On the **General** tab of the Single Values properties browser, click the cell selector button next to the **Data** field.
3. Click the cell that contains the bound parameter and then click **OK**.
4. Repeat steps 1 through 5 outlined in *To create an Xcelsius 2008 Visualization using LiveOffice* on page 203.
5. On the **Usage** tab, click the Cell Selector button beside the **Trigger Cell** field.
6. Click the cell that contains the bound parameter and then click **OK**.
7. Ensure that **Trigger on Change** only is selected.

   Configuring the Trigger Behavior this way causes the SWF to refresh each time there is a change to the cell and in this case, the parameter value.
8. Click the **Preview** button to generate a SWF file.

When you adjust the Single Value component in the SWF file, you receive a prompt to log on to your Enterprise system. When you have successfully logged on, the data is refreshed and the new value or values are reflected in your SWF file.

Storing Xcelsius 2008 files in Crystal Reports Server or BusinessObjects Enterprise

You can use BusinessObjects Enterprise or Crystal Reports Server as a secure repository to store and manage XLF and SWF files. Once the files have been added to the Enterprise system, any user with the appropriate rights can log on and view the XLF and SWF files.

Saving XLF files to an Enterprise folder

Once you have created an XLF file, you can save it to a folder in BusinessObjects Enterprise or Crystal Reports Server.

To save an XLF file to an Enterprise folder

1. In Xcelsius, on the **File** menu, click **Save to Enterprise.**

   The Log On to BusinessObjects Enterprise dialog box appears.

2. Enter your logon information.
   - In the **System** field, type the name of the Central Management console (CMC) where you want to save the XLF file.

     The CMC stores information about the objects saved to the Enterprise system. For more information about the CMC, refer to the BusinessObjects Enterprise or Crystal Reports Server guides.
   - In the **User name** and **Password** fields, type your logon credentials.
   - On the **Authentication** list, click the appropriate authentication type.

   If you are unsure of your logon information, contact your system administrator.

3. Click **OK**.
4. Select the folder where you want to save the XLF file, enter a file name, and click **Save**.

   Tip: To add a folder to the CMC, click New Folder.

Opening XLF files from an Enterprise folder

When an XLF file is saved to an Enterprise folder in BusinessObjects Enterprise or Crystal Reports Server, it can also be opened from that location.

To open an XLF file from an Enterprise folder

1. In Xcelsius 2008, on the **File** menu, click **Open from Enterprise**.

   The Log on to BusinessObjects Enterprise dialog box appears.

2. Enter your logon information.

- In the **System** field, type the name of the Central Management Console (CMC) that you want to open the XLF file from.

  The CMC stores information about the objects saved to the Enterprise system. For more information about the CMC, refer to the BusinessObjects Enterprise or Crystal Reports Server guides.
- In the **User name** and **Password** fields, type your logon credentials.
- From the **Authentication** list, select the authentication type.

If you are unsure of your logon information, contact your system administrator.

3. Click **OK**.

   When you have successfully logged on to your Enterprise system, the folder structure of your Enterprise system appears in the Open dialog box.
4. Select the folder that contains the XLF file you want to open, and click **Open**.

   The XLF file opens in Xcelsius 2008.

Exporting SWF files to an Enterprise folder

You can export a SWF file generated within Xcelsius 2008 to a folder in BusinessObjects Enterprise or Crystal Reports Server.

To export a SWF file to an Enterprise folder

1. In Xcelsius 2008, open the XLF file.
2. On the **File** menu, point to **Export**, and click **BusinessObjects Platform**.

   The Log On to BusinessObjects Enterprise dialog box appears.
3. Enter your logon information.
   - In the **System** field, type the name of the Central Management Console (CMC) that you want to export the SWF file to.

     The CMC stores information about the objects saved to the Enterprise system. For more information about the CMC, refer to the BusinessObjects Enterprise or Crystal Reports Server guides.

- In the **User name** and **Password** fields, type your logon credentials.
- On the **Authentication** list, click the appropriate authentication type.

If you are unsure of your logon information, contact your system administrator.

4. Click **OK**.

   The Save As dialog box appears and displays the folder structure of the Enterprise repository.

5. Select the folder that you want to export the SWF file to, enter a file name, and click **Save**.

   The SWF file is exported to the Enterprise repository.

Managing Xcelsius 2008 files in Crystal Reports Server or BusinessObjects Enterprise

The Enterprise system allows you to manage Xcelsius 2008 files through InfoView and the Central Management Console (CMC).

You can perform the following tasks with XLF and SWF files in InfoView:

- View a list of your XLF and SWF files.
- Search for specific files.
- Move or copy files to different folders.
- View and refresh SWF files in InfoView.

If you have administrative rights to the Enterprise system, you can modify the edit and view rights for XLF and SWF files within the Central Management Console (CMC).

Note: You cannot view XLF files in InfoView. To view XLF files that have been added to the Enterprise system, you must open the XLF file within Xcelsius 2008. For more information, see *Opening XLF files from an Enterprise folder* on page 206.

With the release of Crystal Reports 2008, it is now possible to embed an Xcelsius-generated SWF file into a Crystal Report and have the SWF

consume data from that report. When set up properly, refreshing the data in your Crystal Report will update the embedded SWF.

To configure your Xcelsius SWF to consume data from its Crystal Rport source data, you must open the Data Manager in Xcelsius and add a new Crystal Report Data Consumer connection. After adding the connection, bind the following ranges to your spreadsheet:

- Row Headers
- Column Headers
- Data

The components in your visualization should be bound to the aforementioned ranges.

Next, you will export your visualization to Adobe SWF. Using Crystal Reports 2008, embed the SWF file into the Crystal Report source data file. When designing your Crystal Report, you will determine what fields/data populate the Row Headers, Comumn Headers, and Data ranges that were designated in your Xcelsius SWF. When set up properly, refereshing your Crystal Report will also refresh the data being sent to and consumed by the embedded SWF. See the Crystal Reports 2008 User Guide for more information on working with Crystal Reports.

Viewing SWF files in InfoView

The process for viewing a SWF file in InfoView is the same as the process for viewing other file types in BusinessObjects Enterprise or Crystal Reports Server.

To view a SWF file in InfoView

1. To launch InfoView, open your web browser and enter one of the following paths depending on your Enterprise deployment:
   - .NET

     ```
     http://webserver/businessobjects/enterprise115/
     ```

   - Java

     ```
     http://webserver:portnumber/businessobjects/enter
     prise115/desktoplaunch
     ```

   Here, webserver represents the name of the web server, and portnumber represents the connection port.

The CMC stores information about the objects saved to the Enterprise system. For more information about the CMC, refer to the BusinessObjects Enterprise or Crystal Reports Server guides.

Tip: If you have Enterprise installed on your machine, you can also access InfoView on the Start menu. Click Start > Programs > Business Objects > BusinessObjects Enterprise. Click either .NET InfoView or Java InfoView depending on your Enterprise deployment.

2. Enter your logon information.
   - In the **System** field, type the name of the Central Management Console (CMC) that the SWF file is saved to.
   - In the **User name** and **Password** fields, type your logon credentials.
   - From the **Authentication** list, select the authentication type.

   If you are unsure of your logon information, contact your system administrator.
3. Click **Log On**.
4. Go to the folder that contains the SWF file you want to view.
5. Click the name of the SWF file.

   The SWF opens inside the InfoView panel.

Refreshing SWF files in InfoView

In InfoView, users can refresh a Live Office-enabled SWF file to view the newest data.

When you design the visualization in Xcelsius 2008, you can set the visualization to refresh in InfoView in one of the following ways:

- Refresh on Load
- Refresh on Interval
- Manual Refresh
- Refresh based on Trigger Behavior

If you are unsure of how the data in the SWF file refreshes, check the LiveOffice connection settings in the XLF file in Xcelsius 2008.

To check the LiveOffice connection refresh setting

1. In Xcelsius 2008, open the XLF file.
2. In the Data Manger, open the LiveOffice connection properties.
3. On the **Usage** tab, ensure the refresh setting that you want has been selected and configured.

Refresh on Load

If you selected Refresh on Load when you configured the LiveOffice connection in Xcelsius 2008, the file automatically refreshes when you view it.

To refresh a SWF file on load

1. Ensure that you have a Live Office-enabled SWF file saved to Enterprise that has its refresh option set to **Refresh on Load**.
2. Open InfoView and find the SWF file you want to view.

   For more information, see *Viewing SWF files in InfoView* on page 209.
3. Open the SWF file.

   The SWF file is refreshed with the newest data from the data source.

Refresh on Interval

If you selected Refresh on Interval when you configured the LiveOffice connection in Xcelsius 2008, the file refreshes at the interval you selected.

To refresh a SWF file on interval

1. Ensure that you have a Live Office-enabled SWF file saved to Enterprise that has its refresh option set to **Refresh on Interval**.
2. Open InfoView and find the SWF file you want to view.

   For more information, see *Viewing SWF files in InfoView* on page 209.
3. Open the SWF file.

   The SWF file automatically refreshed after the set number of seconds has passed.

Manual refresh

If you did not select any refresh option when you configured the LiveOffice connection in Xcelsius 2008, you must click a Connection Refresh Button to refresh the file.

To manually refresh a SWF file

1. Ensure that you have a LiveOffice-enabled SWF file saved to Enterprise that has a Connection Refresh Button configured to refresh the LiveOffice connection.
2. Open InfoView and find the SWF file you want to view.

   For more information, see *Viewing SWF files in InfoView* on page 209.
3. Open the SWF file and click the Connection Refresh Button.

   Note: This button may have been renamed when the visualization was created.

   When the Connection Refresh button is clicked, the Xcelsius 2008 file is refreshed with the newest data from the data source.

Refresh based on Trigger Behavior

If you passed a Crystal Reports parameter to the Xcelsius 2008 visualization, and used the features in the Trigger Behavior area to configure the refresh option, the data refreshes when the parameter value changes in the Trigger Cell that you specified.

To refresh a SWF file based on trigger behavior

1. Ensure that you have a Live Office-enabled SWF file saved to Enterprise with the following characteristics:
   - A Single Value component configured to trigger the refresh.
   - A LiveOffice connection configured to refresh based on the settings in the Trigger Behavior area.
2. Open InfoView and find the SWF file you want to view.

   For information on how to do this, see *Viewing SWF files in InfoView* on page 209.
3. Open the SWF file and change the value on the Single Value component.

The data is refreshed and the new value or values are reflected in the file.

Refreshing Xcelsius 2008 visualizations outside InfoView

If you are outside of InfoView and you have a connection to the Enterprise system, you can still refresh an Xcelsius 2008 visualization with the newest data.

To refresh an Xcelsius 2008 Visualization outside InfoView

1. Ensure that you have a LiveOffice-enabled Xcelsius 2008 visualization with a Connection Refresh Button configured to refresh LiveOffice.
2. Open the Xcelsius 2008 Visualization and click the Connection Refresh button .

   This button may have been renamed when the visualization was created.

   The Log On to BusinessObjects Enterprise dialog box appears.
3. Enter your logon information.
   a. In the **System** field, type the name of the Central Management Console (CMC) where you want to save the XLF file.

      The CMC stores information about the objects saved to the Enterprise system. For more information about the CMC, refer to the BusinessObjects Enterprise or Crystal Reports Server guides.
   b. In the **User name** and **Password** fields, type your logon credentials.
   c. On the **Authentication** list, click the appropriate authentication type.

   If you are unsure of your logon information, contact your system administrator.
4. Click **OK**.

   The visualization is refreshed with the newest data from the data source.

Modifying edit and view rights in the Central Management Console

If you have administrative rights to the Enterprise system, you can modify the edit and view rights of XLF and SWF files in the Central Management Console (CMC).

For more information about rights and how they work, refer to the *BusinessObjects Enterprise Administration Guide*.

To modify rights in the CMC

1. To launch the CMC, open your web browser and enter one of the following paths depending on your Enterprise deployment:
   - .NET

     ```
     http://webserver/businessobjects/enterprise115/WebTools/adminlaunch/default.aspx
     ```

   - Java

     ```
     http://webserver:portnumber/businessobjects/enterprise115/adminlaunch/launchpad.html
     ```

   Here, webserver represents the name of the web server, and portnumber represents the connection port.

   Tip: If you have Enterprise installed on your machine, you can also access InfoView on the Start menu. Click **Start > Programs > Business Objects > BusinessObjects Enterprise**. Click either .NET Administration Launchpad or Java Administration Launchpad depending on your Enterprise deployment.

2. Click **Central Management Console**.
3. On the CMC Log On page, enter your logon information.
   - In the **System** field, type the name of the CMC where the XLF or SWF file is stored.
   - In the **User name** and **Password** fields, type your logon credentials.
   - From the **Authentication** list, select the authentication type.
4. Click **Log On**.
5. On the CMC home page, click **Objects**.

A list of all the objects on the CMC appears.

6. Click the XLF or SWF file you want.
7. Click the **Rights** tab.
8. Use the lists under **Access Level** to set the rights for each user group.
9. When you have finished, click **Update** to submit the changes that you have made.

Updating LiveOffice connection settings after system migration

When content is migrated from one BusinessObjects Enterprise system to another, the location of the LiveOffice Web Services changes. Therefore, the Data Manager settings for the LiveOffice connection become incorrect and LiveOffice-enabled visualizations cannot be refreshed.

You can update the web.config file or web.xml file directly to update the LiveOffice Web Services location without having to open each individual visualization.

Note: Editing the web.config or web.xml file incorrectly can lead to unexpected behavior. Ensure you backup your files before making any changes to them.

To update the web.config file for .NET InfoView

1. Locate `web.config` by going to

   <drive>:\Program Files\Business Objects\BusinessObjects Enterprise 11.5\Web Content\Enterprise115\InfoView\web.config

2. Open `web.config` in a text editor such as Notepad.
3. Search for the following text at the end of file:

```
<appSettings>
<add key="applications" value="com.businessobjects. encyclo
pedia.reportviewer.wrapper.InfoViewPanel, analyticwrapper"/>
```

4. When you find this text, add the following text below it:

```
<add key="webConnectorUrl" value="http://webservice:port/dsws
bobje/services/session"></add>
```

Where webservice represents the name of your web service and port represents the port number that the web server communicates on.

This setting overrides the setting that is in Xcelsius 2008.

To update the web.xml file for Java InfoView

1. Locate `web.xml` by going to:

   ```
   C:\Program Files\Business Objects\web server\webapps\busines
   sobjects\enterprise115\desktoplaunch\WEB-INF\web.xml
   ```

   Where web server is the name of your web server.

2. Open `web.xml` in a text editor such as Notepad.
3. Search for the following text at the end of file:

   ```
   <context-param>
   <param-name>crystalXcelsius 2008.webconnectorurl</param-name>
   ```

4. When you find this text, add the following text below it:

   ```
   <param-value>http://webservice:port/dswsbobje/services/ses
   sion</param-value>
   ```

   Where webservice represents the name of your web service and port represents the port number that the web server communicates on.

This setting overrides the setting that is in Xcelsius 2008.

Launching an InfoView document from Xcelsius 2008

Xcelsius visualizations stored in InfoView can be configured to open reports or other documents that are also in InfoView. This is accomplished by adding the OpenDocument API (Application Programming Interface) to the URL that is used to call the document. The OpenDocument API was created by Business Objects to provide a standard way of opening documents and reports that have been published to BusinessObjects Enterprise using a simple URL. OpenDocument allows you to specify not only the report but also report parameters to return only the desired data.

Note: OpenDocument launches the report or document in a separate browser window.

Basic Structure:

```
http://<webserver>/businessobjects/enterprise115/<platformSpe
cific>?<parameter1>&<paramter2>&...&<parameterN>
```

Note: The URL needs to be URL-encoded if it contains non-URL safe characters.

Sample URL:

```
http://cdi5boe:8080/businessobjects/enterprise115/deskto
plaunch/opendoc/openDocument.jsp?sType=rpt&sRepoType=corpo
rate&sPath=[folder],[subfolder1],[subfolder2]&sDocName=Report
Name&IsSpromptName1=promptValue1
```

The sample URL is structured per below; sections in **bold** would need to be customized to the file:

Protocol:	http:// *(can be https://)*
Server name:	**cdi5boe:**
Port:	**8080/**
Open Doc JSP:	businessobjects/enterprise115/desktoplaunch/opendoc/openDocument.jsp? **Note:** the syntax for .NET based systems is businessobjects/enterprise115/InfoView/scripts/opendocument.aspx
Type:	sType=**rpt**& **Note:** rpt = Crystal Reports; wid = Web Intelligence; rep = Desktop Intelligence; car = OLAP Intelligence
Repository Type:	sRepoType=**corporate**&
File Path:	sPath=[**folder**],[**subfolder1**],&[**subfolder2**]

FileName:	sDocName=**ReportName**& **Note:** If the sDocName is not unique, the sPath will need to be specified. Alternatively, iDocID can be used to identify the document.
Prompts:	lsS**promptName1**=**promptValue1**

Tip: OpenDocument can also be used with primary visualization that are not in InfoView, but which have secondary files in InfoView. The user will be prompted for InfoView credentials prior to launching the document.

For more information on URL reporting using OpeDocument, see *Viewing Reports and CDocments using URLs* in the BusinessObjects XI SDK developer documentation.

The OpenDocument URL can be entered directly into the URL field of the URL Button component. The URL Button can also be linked to a URL as text in a cell of your spreadsheet. In combination with Selector components and the Excel CONCATENATE function, the URL can be changed dynamically based on user selection.

Opening an Infoview SWF with Xcelsius 2008

Xcelsius visualizations stored in InfoView can be configured to open secondary SWF files that are also in InfoView. This is accomplished by adding the DocumentDownload function to the URL that is used to call the file. The DocumentDownload function was created by Business Objects to provide a standard way of opening SWF files that have been published to BusinessObjects Enterprise.

Note:

- DocumentDownload will open the secondary SWF file within Xcelsius, for example in a Slide Show component. This makes DocumentDownload the choice for creating a "nested" or "parent-child" visualization within InfoView.
- Logon credentials are not passed from the parent visualiztion HTML file when calling a secondary SWF file. Therefore, DocumentDownload requires appending CELogonToken to the URL.

Basic Structure:

http://<webserver>/documentDownload?<parameter1>&<paramter2>&...&<parameterN>
&CELogonToken=<>

Note: The URL needs to be URL-encoded if it contains non-URL safe characters.

Sample URL:

```
http://cdi5boe:8080/documentDownload?iDo
cID=10348&sKind=Flash&CELogonToken=SERVER%408757Jxnge3URUJ8L4
```

The sample URL is structured per below; sections in **bold** would need to be customized to the file:

Protocol:	http:// *(can be https://)*
Server name:	**cdi5boe:**
Port:	**8080/**
Function:	documentDownload?
Document ID*:	iDocID=**10348**& **Note:** iDocID is the ID or the CUID of the SWF file.
File Type*:	sKind=Flash& **Note:** sKind must be Flash.
LogonCredentials*:	CELogonToken=**SERVER%408757JxmheURUJ8L4**

**These paramters are required with the documentDownload function.

Tip: To obtain the document ID, navigate to the document in InfoView, hover your mouse over the document name hyperlink, and look for the ID number in the browser's staus bar. You can also obtain the document ID from the Central Managment console.

BusinessObjects XI Release 3 Notes:

- In Release 3, you can use the sDocName (file name) parameter as an alternative to the iDocID.
- In Release 3, the DocumentDownload function is appended to read: Xcelsius/opendoc/documentDownload?

Note: Additional parameters can be passed into the SWF file by adding FlashVar ranges to the URL, for example: "Range1=yyy&Range2=zzz&"

To pass the CELogonToken from the parent visualization to a child SWF, a Flash Variable connection must be added to the primary visualization. Open the Data Manager, click Add, and select Flash Variables. In addition to the connetion required for the CELogonToken, any additional parameters must have Flash Variable connections. Any additional parameters are converted to FlashVars by the Flash Player.

The DocumentDownload URL can be entered directly into the URL field of the Slide Show component. The Slide Show can also be linked to a URL as text in a cell in your spreadsheet. In combination with Selector components and the Excel CONCATENATE function, the URL can be changed dynamically based on user selection.

Frequently Asked Questions

chapter 12

Installation questions

Do I need to install Adobe Flash to use Xcelsius 2008?

Adobe Flash player version 9 is required for Xcelsius 2008 to function properly. If you did not install Adobe Flash as part of the installation process, you can download and install Flash from the Adobe web site *http://www.adobe.com*.

Why doesn't Xcelsius 2008 function after I upgrade or install Microsoft Office?

When Xcelsius 2008 is installed, it automatically configures itself to work with the version of Microsoft Office that is installed. If you upgrade or change the version of Microsoft Office on your machine, Xcelsius 2008 must be re-installed to work properly with the new version.

Embedded Spreadsheet questions

Why doesn't my Excel formula paste correctly?

You may have more than one instance of Excel open. Excel can only copy formulas within a single instance of Excel. When Xcelsius 2008 launches, it opens an instance of Excel in the background. If you subsequently open Excel, it will open as a second instance, and formulas will not copy between the two instances.

Tip: You can see how many instances of Excel are running by checking the Processes tab in the Task Manager.

If you are planning to work with Excel spreadsheets while you work with Xcelsius 2008, we recommend opening Xcelsius 2008 first, then opening the Excel spreadsheets you need by navigating to them using the Windows explorer and double-clicking on them. Do not open the files by using File > Open in the Excel menu.

Why does the look of my component change when I copy it into a new visualization?

Some component customization will carry over into a new visualization. Themes will not carry over into a new visualization, but other customizations can effect the appearance properties in the new visualization:

- If you have not customized the component, it will take on the properties of the components in the new visualization.
- If you have customized the component the properties will carry over.

Why doesn't my visualization display my spreadsheet customization?

Some Excel functions (conditional formatting and macros, for example) that are available in the embedded spreadsheet are not supported in Xcelsius 2008 models and will not display properly in your visualization.

LiveOffice questions

Why do all of the spreadsheet columns refresh, instead of just the selected columns?

When specific columns are selected for refresh in a XLF file that connects to a Live Office View, all the columns are refreshed in the SWF file, not just the ones indicated in the XLF. This is because all columns are refreshed regardless of the column selection. You can, however, select individual rows to refresh.

Language questions

How to I change the language in Xcelsius 2008?

Go to **File > Preferences > Languages** and select the desired language from the dropdown menu. Only languages that were selected during installation will be available in the dropdown menu.

What if the language I want is not listed in Preferences?

Languages are only available in the Preferences drop-down if they were selected when Xcelsius was installed. To add languages available under **File > Preferences > Languages**, you must uninstall Xcelsius 2008 and re-install the program. During the installation process, you will be asked which languages you would like to install; the languages you select to install wil be available in the Preferences drop-down

Microsoft Excel questions

Can I re-import an Excel file with a renamed spreadsheet?

You can re-import spreadsheets with renamed sheets, but any bindings to cells in the renamed sheet will be lost.

Why does my table look different than my Excel spreadsheet?

The Table component only supports the Verdana font. Your Excel spreadsheets may be using a different font which will result in minor visual differences between the spreadsheet and your tables. To match your views, change the spreadsheet font to Verdana.

Microsoft PowerPoint questions

How can I embed an Xcelsius 2008 SWF file into an existing PowerPoint presentation?

Within Xcelsius 2008 you can embed your current SWF file into a new PowerPoint presentation using the Export to PowerPoint options. You can then cut and paste your SWF into another presentation. See *Exporting your visualization to PowerPoint* on page 134 for more information.

Troubleshooting questions

Why doesn't my component show scientific formatting?

The visual display of scientific formatted numbers is not supported at this time. Calculations that are dependent upon scientific formatted numbers are not affected.

Why doesn't my URL button work?

Your URL must include http:// for it to function correctly.

What happened to the scenarios I saved?

If you are having trouble saving and loading scenarios with the Scenario button, refer to *How does the Local Scenario Button component work?* on page 118.

Why can't I drag my Slider, Dial, or other single value component?

The values of single value components that are linked to cells with formulas cannot be adjusted. This prevents inconsistencies in the visualization.

Why do I receive a Server Busy message?

The Server Busy message means that Excel has a pending operation or is busy performing an instruction. Check Excel to make sure it is not in the process of editing and then click Retry on the warning dialog box.

Why do I receive the message "A script in this movie is causing Flash Player to run slowly..."?

The Flash Player used to view Xcelsius 2008 visualizations displays this message when a script has taken more than 60 seconds to run. Due to the complexity of Xcelsius 2008 visualizations, larger visualizations running on slow machines may cause this message to be shown, particularly at startup. If you click **No** on the message dialog box, the visualization should load properly.

Note: While in Preview mode, pressing **Yes** to abort the script causes the preview to stop working. You will need to exit Preview, then return to Preview mode, to properly preview the visualization.

Why does my visualization start in a strange state?

When a visualization is loaded, all selectors insert their default selection data into their Destination ranges to populate other components with data. When more than one selector inserts into the same range, the selector at the highest layer inserts last. This overrides the default data inserted by the other selectors.

You can use the Object Browser to view the order of the components and change the order using the Layer Options.

Why are formula-based indexes for my VLOOKUP array not changing at runtime?

To maintain the speed and efficiency of the VLOOKUP function, Xcelsius 2008 does not recalculate formulas in the index column of a VLOOKUP array.

If you have a VLOOKUP function that contains a formula in the index column, the index column cell always contains the initial value of the formula.

Why are my URL-based images not visible in preview mode?

Relative paths

URL references to images that are relative paths do not display in preview mode because the preview SWF file is generated in a temporary directory.

When you export the SWF file to a location that will make the relative paths valid, the images will load properly.

JPEG files on a web site

If you are referencing JPEG files on a web site, be sure that the JPEG files are not progressive JPEGs. Progressive JPEG load in stages, which allows low-bandwidth users to see an image quickly and without having to wait for the entire image to load.

Xcelsius 2008 cannot display progressive jpegs that are referenced by a URL. If you select the embed option when you reference a progressive JPEG , Xcelsius 2008 displays the progressive JPEG as expected.

Why isn't my visualization connecting with its external data source?

Xcelsius 2008 requires Flash version 9. This version has security features which may prevent your visualization from connecting with an external data source. Without a policy file, SWF files from one domain cannot access data on another domain or sub-domain. In addition, SWF files served over HTTP cannot access data at an HTTPS location. Please refer to the online article from Adobe regarding security restrictions for data loading for information on creating a policy file to allow access to data in the cases above.

Questions about supported features

What Excel functions are supported by Xcelsius 2008?

See *Supported Excel Functions* on page 372 for a complete list of functions.

What is the maximum limit of rows for a single range selection?

There is no limit to the number of rows for a selection. However, the size of your selection can affect the performance of your visualization.

Does Xcelsius 2008 support Excel files that link to other Excel files?

No, this feature is not supported by Xcelsius 2008.

How large can my Excel file be?

There is no limit to the size of a spreadsheet that can be used in Xcelsius 2008. There are a number of factors, however, which may affect the performance of your visualization. These include:

- the number of components you have on the canvas
- the amount of data that is being changed during the visualization
- the complexity of the calculations being performed

The speed of the computer can also greatly affect performance, and should be kept in mind when developing visualizations that will be distributed to other users.

Which regional Excel formats does Xcelsius 2008 support?

Xcelsius 2008 automatically detects the regional formatting being used on your machine and adjusts its output appropriately.

For example, if your regional settings use forward slash (/) for the date separator, the date January 2, 2004 appears as 1/2/04 in your Xcelsius 2008 visualizations. If your regional settings use a hyphen or dash (-) for the date separator, the date appears as 1-2-04 in the exported visualization.

These settings can be found under the Regional and Language Options of the Windows Control Panel. The following items are automatically adjusted:

- decimal separator
- thousands separator
- general format name
- month
- day
- year
- hour
- minute

- second
- time separator
- date separator

Why don't my Excel macros work?

Xcelsius 2008 does not support macros in Excel spreadsheets at this time.

General Properties Panel Reference

chapter 13

Overview

This section discusses Properties panel features that are common to most components. Depending on the component that you are working with, some of these features may be unavailable.

Common buttons

The buttons described in this section appear on the Properties panels for most components.

Cell Selector button

 The cell selector button lets you select a cell or a cell range in the spreadsheet and link to various data values.

When you click a cell selector button, the Select a Range dialog box opens. In the embedded spreadsheet, highlight the cell(s) to select. The location number of the selected cell or cells appears in the dialog box.

Click OK in the Select a Range dialog box. The location of the selected cell or range appears in the box adjacent to the cell selector button.

Color Selector button

 The color selector button lets you select a custom color for part of the component.

When you click a color selector button, the Color dialog box appears. Select the desired color from the Theme Colors or Standard Colors, or click More Colors to access more colors. Select a color or close the dialog box to return to the Properties panel.

More Colors

There are two ways to select additional colors in the dialog:

- Standard Tab

  Select a color from the color wheel.

- Custom Tab

  Select a color by clicking on the color with the mouse pointer. Use the slider on the right to brighten or darken the color.

  You can also manually enter RGB or HSL color values. Select the color model type from the drop down and enter the values in the appropriate boxes.

Manual Edit button

 The Manual Edit button lets you manually enter text values for a component instead of selecting the text values in the spreadsheet. When you click the Manual Edit button, a dialog box appears. In the dialog box, type the values directly into the cells to enter new text values or overwrite the default values.

If you have not reached the maximum number of values for the list, you can add a new text value by typing the new text value and clicking Add.

When you are finished adding or editing, click OK to close the dialog box and return to the Properties panel.

Information button

 The Information button provides information about how a feature on the Properties panel works. When you click the Information button, a new window opens, and an animated movie guides you through the way a feature works. You can go to different pages in the movie, and click play or pause to find

the information you need. When you are finished, close the window to return to the Properties panel.

Appearance tab

The areas described in this section are common to most components, and always contain the same features.

Layout tab

Thickness

The Thickness box determines how thick a line is. You can enter a value from 1 to 100, with 1 being the thinnest line, and 100 being the thickest line.

Transparency

The Transparency box lets you set the transparency value for the component. You can drag the slider or enter a value from 0 to 100, with 100 being completely transparent, and 0 being completely solid.

Text tab

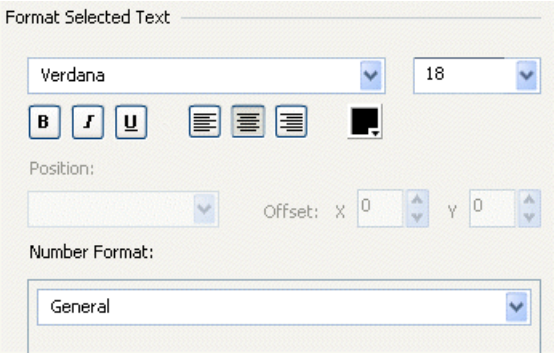
The Text tab lets you customize text elements for a component.

Show-Text selection box

The Show-Text selection box lists available text elements. Click the adjacent checkbox to enable visibility of that element.

Format Selected Text

The Format Selected Text area contains options for formatting the text elements in the Show-Text selection box. The following options apply only to the highlighted text element.



Font

By default, the font is set to Verdana. Select a font from the dropdown list to change the font.

If you chose to use non-embedded fonts in the visualization, you can use the font box to change the font for the component. For information about changing the font, see *Understanding fonts in Xcelsius 2008* on page 57.

Size

To set the font size, type a number in the box or select a number from 8 to 72 from the dropdown menu.

Bold

Click the bold button to make the text bold.

Italic

Click the italic button to italicize the text.

Underline

Click the underline button to underline the text.

Alignment

Click one of the boxes to select a text alignment option: left, center, or right aligned.

Color

Click the color selector button to customize the font color.

Position

The Position dropdown menu lets you specify the position of text. Depending on the component that you are working with, some of the Position items below may not be available:

- Top Center
- Top Left
- Top Right
- Left
- Right
- Center
- Bottom Left
- Bottom Center
- Bottom Right

Offset X

The Offset X (formerly Horizontal Offset) box lets you shift text horizontally relative to the position you specified in the Position list. To enter the Offset X value, type a numerical value in the box, or use the up and down arrows adjacent to the Offset X box. Negative values shift the title left; positive values shift the title right.

Offset Y

The Offset Y (formerly Vertical Offset) box lets you shift text vertically relative to the position you specified in the Position list. To enter the Offset Y value, type a numerical value in the box, or use the up and down arrows adjacent to the Offset Y box. Negative values shift the title downward; positive values shift the title upward.

Number Format

Number Format lets you apply predefined formats to numerical data displayed in the visualization. Some of the formats on the Number Format list provide more options for customizing the appearance of numerical data.

General

The General format displays numeric data as it appears. This format has no additional options for customization.

Numeric

The Numeric format provides the following options for customizing the format of numeric values.

Negative Values

The Negative Values list lets you select a format for negative values:

- Minus Sign Prefix
- Red Text
- Parenthesis
- Red Text with Parenthesis

Decimal Places

The Decimal Places box lets you enter the number of decimal places to display. You can enter a value from 0 to 20.

Use 1000 Separator

When you select the Use 1000 Separator check box, Xcelsius 2008 inserts commas into numerical values above 999.

Currency

The Currency format provides the following options for customizing the format of currency values.

Negative Values

See *Numeric* on page 237.

Decimal Places

See *Numeric* on page 237.

Prefix

When you select the Prefix check box, Xcelsius 2008 precedes currency values with a symbol. This symbol is set to "$" by default. To change the symbol, enter the desired character(s) in the adjacent box.

Suffix

When you select the Suffix check box, Xcelsius 2008 adds a symbol to the end of currency values. Enter the desired symbol in the adjacent Suffix box.

Percent

The Percent format provides the following option for customizing the appearance of percentage values.

Decimal Places

See *Numeric* on page 237.

Date

The Date format provides the following option for customizing the appearance of date values:

Type

Select the desired date format from the Type list.

Time

The Time format provides the following option for customizing the appearance of time values:

Type

Select the desired time format from the Type list.

Text

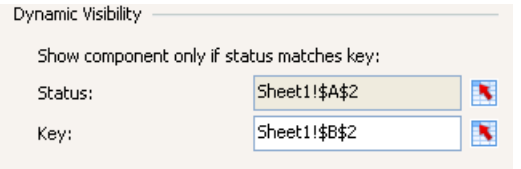
The Text format displays numerical values as plain text. This format has no additional options for customization.

Behavior Tab

Common tab

Dynamic Visibility

The Dynamic Visibility area appears on the Common tab in the Behavior tab. The features in the Dynamic Visibility area control the visibility behavior of the component.



Status

Status lets you select a cell in the embedded spreadsheet to control the visibility of the component. If the value in the Status cell equals the value of the Key, the component will be displayed.

Note: Do not link Status to a cell or range of cells that are already linked within the same component (for example, Data ranges). The overlap will cause those data sources in the component to not refresh if changed dynamically.

Key

Key lets you specify the value that the Status must match for the component to become visible.

Enter the value in the box or use the cell selector to bind the value to a cell in the embedded spreadsheet.

Note: The Key is not available unless Status has been set.

Animations and Effects tab

Entry Effect

In this area you can set how the component will initially appear, or re-appear using Dynamic Visibility, in the visualization and enable any available animation.

- Effect Type
  - None

    The component has no entry effect.
  - Fade-in

    The component appears in a semi-transparent state and gradually becomes solid.
  - Grow

    The component appears gradually until it reaches its full size.
  - Grow X First

    The component appears gradually, first appearing at its full height, and then growing to its full width.
- Duration (Seconds)

The Duration box is available only if you selected Fade-in, Grow, or Grow X First on the Entry Effect list, and lets you determine how long the effect lasts. You can enter a value from 0 to 10, with 0 being the shortest duration, and 10 being the longest duration.

Alerts Tab

Alerts let the user know that a predefined value has been reached. The settings on the Alerts tab control how alerts behave for a component when the visualization is run. Depending on the component that you are working with, some of the settings described in this section may be unavailable.

Note: Not all components are able to display alerts. These components do not have an Alerts tab.

Enable Alerts

The Enable Alerts check box controls whether alerts are enabled for the component.

Click one of the following options to define the alert method for the component:

- Alert Values

  Use the cell selector to choose the data values. (Icon component only)

- As Percent of Max Value

  The alerts use percentages of the largest value.

- As Percent of Target

  The alerts use percentages of the value in a selected cell. Use the cell selector button to select a cell in the embedded spreadsheet.

  Use the Manual Edit button to manually enter the target value.

  Note: Xcelsius 2008 supports the use of separate target values for multiple data points. The maximum number of target values is limited to the number of data points.

- By Value

  The alerts use values that you specify in the Alert Thresholds area.

Alert Variable

The Alert Variable dropdown menu lets you specify whether you want to use X-axis values or Y-axis values to trigger alerts.

Note: This setting is only available for XY Charts and Bubble Charts.

Alert Thresholds

Alert Thresholds specify where the alert levels will be by value or by percentage. In the Alert Thresholds area you set the level for each threshold as well as the color for each level. Alert Thresholds appears only if you have enabled alerts.

Check the **Use a Range** button to select the threshold levels from cells in the spreadsheet.

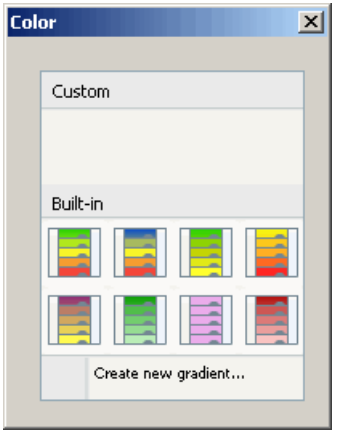
Alternatively, enter a desired threshold value in the text box, click the **Add** button to see it automatically placed in the alert levels list. You can also edit the existing alert levels by clicking either the **From** or **To** values. Alert levels can be deleted from the list by clicking the Delete [X] button.

Note: When **Enable Auto Colors** is checked, the color selector buttons for each alert level are unavailable. To customize an alert level color, clear the check box.

Enable Auto Colors

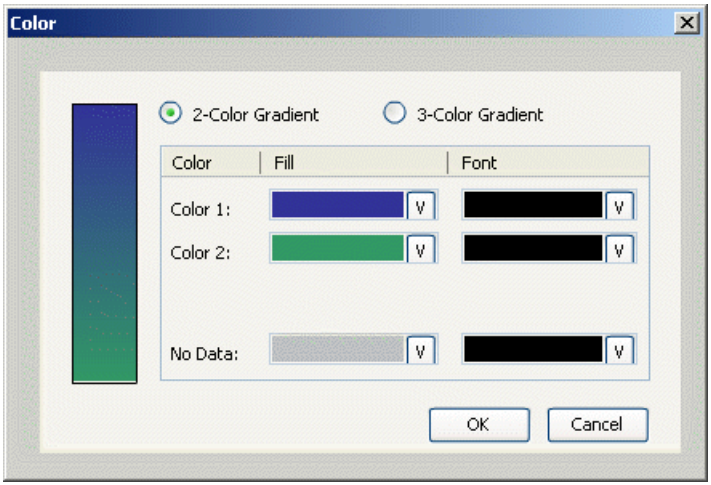
 Enable Auto Colors automatically picks alert colors from a range of colors. If you add or remove alert thresholds, Xcelsius 2008 will automatically adjust the colors along the selected color gradient.

To select a new color range, click the Enable Auto Colors icon, then select a color gradient from the dialog.



Note: You can edit custom gradients by right-clicking on them and editing the colors.

Select **Create new gradient** to create a custom gradient.



Select the number of base colors and use the buttons to customize the fill and font colors.

Fill Color

The down arrow button opens the dialog where you can customize the corresponding fill colors.

Font Color

The down arrow button opens the Color dialog box where you can customize the corresponding color of the text in the Alert Thresholds.

No Data Color

The down arrow button adjacent to No Data Color lets you customize the color for parts of the component which have no alert data.

Color Order

You can click one of the following options in the Color Order area to define the ideal value type for the component:

- Low Values are Good

  Use this option when the ideal value type is lower than the target value. For example, select Low Values are Good when you set alerts for expenses, and you want the expense values to be as low as possible.

- Middle Values are Good

  Middle Values are Good is unavailable if you clicked By Value in the Alert Method area. Use this option when the ideal value type is as close as possible to the target value. For example, select Middle Values are Good when you set alerts for inventory, and you want the inventory quantities to be as accurate as possible

- High Values are Good

  Use this option when the ideal value type is higher than the target value. For example, select High Values are Good when you set alerts for revenue, and you want the revenue values to be as high as possible.

Alert Location

The three check boxes in the Alert Location area let you customize how alerts are displayed:

- Background

  Select this to display the alert colors in the background of the component.

- Value

  Select this to display the alert color on the value.

- Marker

  Select this to display the alert color on the marker.

Note: The Alert Location area is only available for some single value components.

Chart Components Reference

chapter 14

Overview

This section discusses the Properties panel features for Chart components.

This section discusses the Properties panel features for Chart components. The following Chart components are available in all versions of Xcelsius 2008:

- Pie Chart
- OHLC Chart
- Candlestick Chart
- Column Chart
- Stacked Column Chart
- Bar Chart
- Stacked Bar Chart
- Combination Chart
- Bubble Chart
- XY Chart
- Area Chart
- Stacked Area Chart
- Radar Chart
- Filled Radar Chart
- Tree Map

For more information about Chart components, see *Using the Chart components* on page 74.

General tab

Titles

The options in this area set the various titles for the selected chart component.

Chart

Type in the text box or click the adjacent cell selector button to set the title for the chart.

Subtitle

Type in the text box or click the adjacent cell selector button to set the subtitle for the chart.

Category (X) Axis

Type in the text box or click the adjacent cell selector button to set the X-axis title for the chart.

Value (Y) Axis

Type in the text box or click the adjacent cell selector button to set the Y-axis title for the chart.

Secondary Value Axis

Type in the text box or click the adjacent cell selector button to set the Secondary Axis title for the chart.

Note:

- This option applies only to the X- or Y-axis, depending on which axis the chart is plotted on.
- This option is not available for all charts.
- This option only applies if you selected Secondary Axis for the plot series in the Data area.

Data

The options in this area select the ranges of Excel data that contain all of the data for the selected chart.

By Range

Click **By Range** to enable the options in this area.

Click the adjacent cell selector button to select a range of data from the spreadsheet.

- Data in Rows

Click this option to indicate that the series information is organized by rows in the selected range.

- Data in Columns

  Click this option to indicate that the series information is organized by columns in the selected range.

By Series

Click **By Series** to enable the options in this section.

The options in this area edit individual series settings.

The Name, Y Values, and Plot Series On parameters all apply to the series name that is highlighted in the Series box.

Click a series in the list box to edit the data for that series.

- Add

  Click the add button  to add a new series to the chart.

- Remove

  Click the remove button  to remove a series from the chart.

- Move up

  Click the directional arrow  to move a series higher in the Series box.

- Move down

  Click the directional arrow  to move a series lower in the Series box.

- Name

  Type in the **Name** box or click the adjacent cell selector button to set the name of the selected series.

- Values

  Click the cell selector button adjacent to the Values box to select the X (or Y) data points for the selected series.

- Values (Sizes)

  Click the cell selector button adjacent to the Sizes box to set the size value for the selected series.

Note: This option applies only to the Bubble Chart and Tree Map components.

- Values (Color Intensity)

  Click the cell selector button adjacent to the Color Intensity box to set the size value for the selected series.

  Note: This option applies only to the Tree Map component.

- Plot Series On

  If a chart has more than one series of data, you can choose the axis that each series is plotted on.

  - Primary Axis

    Select this option to plot the series on the Primary Axis.

  - Secondary Axis

    Select this option to plot the series on the Secondary Axis

    Note: This option is only available for Line, Column, Bar, Area, and Combination charts.

- Category Axis Labels

  Click the cell selector button adjacent to the Category Axis Labels box to select the category axis labels for the selected series.

The following options are available only in the OHLC and Candlestick Chart components:

- Open

  Click the cell selector button adjacent to the Open box to select the values for the open series.

- High

  Click the cell selector button adjacent to the High box to select the values for the high series.

- Low

Click the cell selector button adjacent to the Low box to select the values for the low series.

- Close

  Click the cell selector button adjacent to the Close box to select the values for the close series.

Drill Down tab

Enable Drill Down

Click Enable Drill down to enable the options on this tab.

Note:

- This tab does not apply to the Area, Stacked Area, Radar, and Filled Radar Chart components.
- The options on this tab are available only if a series has been added to the chart on the General Tab.

Chart Drill-Down Options

The options in this area define how the Chart component will behave when a selection is made. The following options are available:

- Series Name Destination

  Click the Series Name Destination cell selector button to select the cell into which the currently selected series name will be inserted.

- Insertion Type

  Click an option on the Insertion Type list to determine the structure of the data that is inserted when a selection is made. The following options are available:

  - Position

    A target cell is linked to the Chart component. When a series is selected in the Chart component, the position of the value within the series is entered in the target cell.

  - Value

A target cell is linked to the Chart component. When a selection is made on the Chart component the source data value of the selection is entered in the target cell.

- Row

  A target row is linked to the Chart component. When a selection is made on the Chart component the row of source data values corresponding to the selection are entered in the target row.

- Column

  A target column is linked to the Chart component. When a selection is made on the Chart component the column of source data values corresponding to the selection are entered in the target column.

- Status List

  A target range of cells is linked to the Chart component. When a selection is made on the Chart component a value of 1 is entered in the cell in the range representing that selection and a value of 0 is entered in the other cells of the target range

- Series

  Click a series from the list to configure. All series for the chart must be configured individually.

- Source Data

  Click the cell selector button adjacent to the Source Data box to select the data that is inserted when a selection is made on the component.

  Note: This option is enabled only when **Rows** or Columns is selected on the Insert Option list.

- Value Set

  Select a value set from the list.

  Note:

  - The Value Set list is enabled only when Value is selected on the Insertion Type list.
  - This option is only available in Bubble and XY Charts.

- Destination

Click the cell selector button adjacent to the Destination box to select the cells(s) that the data is inserted in.

Note: The Destination cells must be blank or the data inserted may be compromized.

Interaction Options

The selections in this area determine how the component recognizes that a selection has been made.

Click an option on the Insert On list to define the recognition method of the component. The following options are available:

- Mouse Click. The user must click on an item to select it.
- Mouse Over. An item is selected when the pointer passes over it.

Default Selection

The options in this area set the default status of the component. The following options are available:

- Series

  Click an option from the list to select the Series that will configure the default value.

- Item

  Click a value from the Item list to select which data point of the series will be selected by default when the visualization is loaded. This option also determines which default data is inserted into the Destination cells when the visualization is loaded.

Behavior tab

Common tab

Ignore Blank Cells

The options in this area control how the chart handles blank cells at the end of range data. For more information, see *Ignore End Blanks for variable length ranges* on page 146.

- In Series

  Click In Series to prevent all of the empty series past the last non-empty series in a range from being displayed in the Chart component. This option allows a variable number of series to be displayed in the Chart component.

  Note:

  - Although the component may not be displaying all of the data within the Data range, the performance of the visualization is affected by the size of the range.
  - This option does not apply to the Pie Chart component.

- In Values

  Click In Values to prevent all of the empty values past the last non-empty value in a series from being displayed in the Chart component. This allows a variable amount of series data to be displayed in the Chart component.

  Note: Although the Chart component may not be displaying all of the data within the Data range, the performance of the Xcelsius 2008 visualization is affected by the size of the range.

Enable Run-Time Tools

The options in this area control the visibility of optional tools that appear on the chart in the generated SWF file. These options let the end-user modify the Scale Behavior of Chart components during run time in the visualization.

Note: If one or more of the Run-Time Tools are enabled, the run time icon appears on the chart in the visualization.

When the pointer passes over the run time icon, the runtime menu will appear, depending on the tools enabled.

Show Focus Button

Click Show Focus Button to display the Focus Chart Data button  on the run time menu when the visualization is run. Clicking on the Focus Chart Data button forces the chart to rescale the chart axes based on the current data.

Show Reset Scale Button

Click Show Reset Scale Button to display the Reset Chart Scale button  on the run time menu when the visualization is run. Clicking on the Reset Chart Scale button forces the chart to rescale the chart axes to the scale that the chart had when it first loaded.

Show Scale Behavior Options

Click Show Scale Behavior Options to display the scale behavior buttons on the run time configuration menu. Clicking on the scale behavior buttons changes the scaling behavior of the Chart component; the chart axes will scale based on the new setting the next time the chart data changes. The Scale Behavior Options menu has the following options available:



- Click **Grow** to set the scaling behavior to Auto Zoom Out.
- Click **Off** to set the scaling behavior to Manual Scale.
- Click **Auto** to set the scaling behavior to Auto Scale.

Dynamic Visibility

For information on the options available in the Dynamic Visibility area see *Dynamic Visibility* on page 239.

Scale tab

Scale

The options in this area control how the chart axes scale as data changes.

Note: The options in this area do not apply to the Pie Chart component.

Note: There are two scale tabs (one each for Primary and Secondary axis) for Line, Column, Bar, Area, and Combination charts that have two axes.

Manual Axis

Click **Manual Axis** to set the scaling behavior. The axis scale will not change as data changes. The minimum and maximum axis values are fixed at design time.

- Minimum Limit

  Type in the **Minimum Limit** box or click the adjacent cell selector button to select a value to determine the minimum value that can be displayed on the primary axis of the Chart component.

- Maximum Limit

  Type in the **Maximum Limit** box or click the adjacent cell selector button to select a value to determine the maximum value that can be displayed on the primary axis of the Chart component.

Auto Axis

Click **Auto Axis** to set the scaling behavior to grow and shrink as data changes.

- Allow Zoom Out Only

  Click **Allow Zoom Out Only** to set the scaling behavior to grow as data changes, but not shrink. This option is recommended when a chart will be used in an animation. Setting the scale to Zoom Out Only minimizes chart rescaling.

- Zoom Sensitivity

The slider tunes the scaling behavior for the Chart component. The setting determines how much an axis scale will grow as the data changes.

Moving the slider to the left results in the axis scale increasing by a small factor when the chart scale changes. Moving the slider to the right results in the axis scale increasing by a larger factor when the chart scale changes.

Axis Scale

Click an option on the Axis Scale list to select the format of the primary axis for the Chart component. The following options are available:

- Linear

  Click **Linear** to plot the axis values on a linear scale. Values plotted on a linear scale appear at evenly spaced intervals in the chart component.

- Logarithmic

  Click **Logarithmic** to plot the axis values on a logarithmic scale. Values plotted on a logarithmic scale appear at unevenly spaced intervals in the chart component. Smaller values have larger space intervals; larger values have smaller space intervals. Equal percentage changes are represented by equal distances.

Fixed Label Size

Click Fixed Label Size to lock the width of the axis labels so they will not be resized if the scale changes.

- Label Abbreviations

  Click the Label Abbreviations Manual Edit button to display the Label Unit Abbreviations dialog box.

- Label Unit Abbreviations dialog

  Edit the unit abbreviations that appear on the axes labels.

Animations and Effects tab

Chart Animation Enabled

Click **Enable Data Animation** to add animation to the chart components when the visualization is run. In chart components with bars, the bars grow and shrink when the data changes and the visualization is run. In point-based chart components the points grow to full size when the visualization is run.

Note: This option does not apply to Tree Map component.

Entry Effect
For information about Entry Effects, see *Animations and Effects tab* on page 240.

Appearance tab

Layout tab

Chart Area

The options in this area configure the background and border appearance for the Chart component. The following options are available:

- Show Chart Background

  Click Show Chart Background to display a background behind the Chart component.

- Margin

  Enter or adjust the value in the Margin box to control the amount of space between the perimiter of the plot area and the perimiter of the chart border.

Plot Area

The options in this area configure the plot area for the Chart component. The following options are available:

- Show Fill

  Click Show Fill to display a background with a solid fill color within the plot area.

- Fill Color

  Click the color selector button adjacent to Show Fill to set the background fill color.

- Show Border

  Click Show Border to display a border around the plot area.

- Border Color

  Click the color selector button adjacent to Show Border to customize the border color.

- Border Thickness

  Adjust the value in the Border Thickness box to customize the border thickness.

Note: This option does not apply to the Pie Chart component.

Title Area

The options in this area configure the area behind the title for the Chart component. The following options are available:

- Show Fill

  Click Show Fill to display a background with a solid fill color within the title area.

- Fill Color

  Click the color selector button adjacent to Show Fill to set the background fill color.

- Show Border

  Click Show Border to display a border around the title area.

- Border Color

  Click the color selector button adjacent to Show Border to customize the border color.

- Border Thickness

Adjust the value in the Border Thickness box to customize the border thickness.

Enable Legend

Select the Enable Legend box to display the chart Legend. The selections in this area configure the Legend area of the selected chart. The following selections are available:

- Position

  Click a selection on the Position list to set the location of the Legend in the Chart component. The following options are available:

  - Top
  - Left
  - Right
  - Bottom

- Vertical Offset

  Note: Vertical Offset is available only if Left or Right is chosen from the Position dropdown menu.

  For information on Vertical Offset see *Offset Y* on page 237.

- Horizontal Offset

  Note: Horizontal Offset is available only if Top or Bottom is chosen from the Position dropdown menu.

  For information on Horizontal Offset see *Offset X* on page 236.

- Show Fill

  Click Show Fill to display a background with a solid fill color behind the Legend area.

- Fill Color

  Click the color selector button adjacent to Show Fill to set the background fill color.

- Show Border

  Click Show Border to display a border around the Legend area.

- Border Color

Click the color selector button adjacent to Show Border to customize the border color.

- Border Thickness

  Adjust the value in the Border Thickness box to customize the border thickness.

Series tab

Note: The options on this tab do not apply to the Area, Stacked Area, and Filled Radar Chart components.

- Series

  Select a series from the list to modify.

- Shape

  Click a marker format from the Shape list to set the marker symbol displayed on the series data points. The following options are available:

  - Circle
  - Diamond
  - Star
  - Triangle
  - X

  Note: The Shape option applies only to the Line and Radar Chart components.

- Line Color

  Click the color selector button in the Line column to customize the appearance of the lines connecting the data points.

  Note: This option applies only to the Line and Radar Chart components.

- Fill Color

  Click the color selector button in the Fill column to customize the appearance of the data point markers.

- Line Thickness

  This option controls the thickness of the connecting lines. Adjust the value in the thickness box to customize the line thickness.

- Enable Series Markers

  Click Enable Series Markers to display data point markers on the Series.

  Note: This option applies only to the Line, Combination, and Radar Chart components.

- Marker Size

  Adjust the value in the Maker Size box to set the size of the data point markers.

  Note: This option applies only to the Line, Combination, and Radar Chart components.

- Transparency

  For information on Transparency see *Transparency* on page 234.

Specific to OHLC and Candlestick Chart components

The options in this area customize the markers displayed on the Chart components. The following options are available.

- Positive Color

  Click the color selector button adjacent to Positive Color to customize the color for a series in which the close value is higher than the open value.

- Negative Color

  Click the color selector button adjacent to Negative Color to customize the color for a series in which the close value is lower than the open value.

Specific to the Pie Chart component

Data Point selection box

The options in this area configure the appearance of the pie slices for the Pie Chart component.

- Data Point

  Click a Data Point in the list to select the slice to be customized.

- Fill

  Click the color selector button of the highlighted Data Point to customize the color of the slice selected.

- Show Lines

  Check the Show Lines box to display a line between each pie slice.

  Click the adjacent color selector button to customize the line color.

Specific to the Combination Chart component

Type

Click an option from the Type list to select the type of markers to represent the selected Series.

Specific to the Tree Map component

- High Color

  Click the color selector button in the High Color column to customize the appearance of the high intensity color of the Series.

- Low Color

  Click the color selector button in the Low Color column to customize the appearance of the low intensity color of the Series.

Axes tab

Enable Vertical Axis

Click Enable Vertical Axis to display the vertical axis for the Chart component. Use the options in this section to configure the appearance of the vertical axis.

- Line Color

  Click the color selector button adjacent to Line Color to set the axis color.

- Thickness

  Thickness controls the width of the axis. Enter or adjust the value in the adjacet box to set the axis thickness.

- Show Major Ticks

  Click Show Major Ticks to display horizontal tick marks where the major grid lines intersect the vertical axis.

  Note: This option does not apply to the Bar Chart component.

- Show Minor Ticks

  Click Show Minor Ticks to display horizontal tick marks where the minor grid lines intersect the vertical axis.

  Note: This option does not apply to the Bar Chart component.

Enable Horizontal Axis

- Line Color

  Click the color selector button adjacent to Line Color to set the axis color.

- Thickness

  Thickness controls the width of the axis. Enter or adjust the value in the adjacent box to set the axis thickness.

Horizontal Gridlines

Note: The options in this area do not apply to the Pie Chart component.

The options in this area control the display of horizontal grid lines in the plot area of the Chart component. The following options are available:

- Show Major Gridlines

  Click Show Major Gridlines to display major horizontal grid lines in the plot area of the Chart component.

- Major Gridlines Color

Click the color selector button adjacent to Show Major Gridlines to customize the color of the major gridlines.

- Major Gridlines Thickness

  Adjust the value in the Thickness box to customize the thickness of the major gridlines.

- Show Minor Gridlines

  Click Show Minor Gridlines to display minor horizontal grid lines in the plot area of the Chart component.

- Minor Gridlines Color

  Click the color selector button adjacent to Show Minor Gridlines to customize the color of the minor gridlines.

- Minor Gridlines Thickness

  Adjust the value in the Thickness box to customize the thickness of the minor gridlines.

Text tab

For information about text settings, see *Text tab* on page 234.

Color tab

Use the color selector buttons to customize the appearance of the component. The parts of the component that can be customized vary depending on the component you are working with. The following options may be available:

Background Color

Series

- Line
- Fill
- Positive Color
- Negative Color
- High Color

Slices

- Fill Color

Title Area

- Fill
- Border

Plot Area

- Fill
- Border

Legend Area

- Fill
- Border

Axes and Gridlines

- Vertical Axis
- Vertical Major Gridlines
- Vertical Minor Gridlines
- Horizontal Axis
- Horizontal Major Gridlines
- Horizontal Minor Gridlines

Alerts Tab

Note: The Chart Alerts Tab applies only to the Line, Column, Stacked Column, Bar, Stacked Bar, Combination, Bubble, XY, and Radar Chart components.

For information on Alerts, see *Alerts Tab* on page 241.

Container Components Reference

chapter 15

Overview

This section discusses the Properties panel features for the Container components. The Container components available are:

- Panel Container
- Panel Container 2
- Tab Set

  Note: The Tab Set component uses a sub-component labeled Canvas. This component has a Properties panel separate from the Tab Set Properties panel. Each tab in the Tab Set has its own canvas. Click the Plus sign adjacent to the Tab Set in the Object Browser to expand the list of Canvases.

For more information about Container components, see *Using the Container components* on page 85.

General tab

The settings on the General tab let you specify the basic settings for the component.

Title

Type a title for the component or click the adjacent cell selector button to select a title from the spreadsheet.

Tab Alignment

Click the drop-down menu to select an alignment option for the tabs in the component.

Note: This option is only available for the Tab Set component.

Label

Type a label for the component or click the adjacent cell selector button to select a label from the spreadsheet.

Note: This option is only available for the Canvas sub-component.

Behavior tab

The settings on the Behavior tab let you customize how the component will behave when the visualization is run.

Common tab

Scroll Bar options

- Horizontal Scroll Bar

  Click the drop down menu to select one of the following options for displaying the horizontal scroll bar:

  - Off
  - On
  - Auto (default)

- Vertical Scroll Bar

  Click the drop down menu to select one of the following options for displaying the vertical scroll bar:

  - Off
  - On
  - Auto (default)

Note: This setting is not available for the Tab Set component.

Selected Item

Click the Item drop-down menu to select the default Tab that will be loaded when the visualization is run.

Note: This setting is only available for the Tab Set component.

Dynamic Visibility

For information on the options available in the Dynamic Visibility area see *Dynamic Visibility* on page 239.

Note: This setting is not available for the Canvas sub-component.

Appearance tab

The features on the Appearance tab let you customize the appearance of the Container components.

Text tab

For more information about the settings on the Text tab, see *Text tab* on page 234.

Note: This tab is not available for the Canvas sub-component.

Color tab

Use this area to customize the color of various parts of the component. The available elements will be listed with an adjacent color selector button; click this button to customize the color of the element.

The following elements may be available, depending on the component:

- Background Color
- Panel Color
- Scroll bar
  - Track Color
  - Thumb Color
  - Button Color
  - Button Symbol Color
- Tab Backgrounds
  - Default Color
  - Over Color
  - Selected Color
- Labels
  - Default Color
  - Over Color
  - Selected Color

Overview

This section discusses the Properties panel features for the Container components. The Container components available are:

- Panel Container
- Panel Container 2
- Tab Set

  Note: The Tab Set component uses a sub-component labeled Canvas. This component has a Properties panel separate from the Tab Set Properties panel. Each tab in the Tab Set has its own canvas. Click the Plus sign adjacent to the Tab Set in the Object Browser to expand the list of Canvases.

For more information about Container components, see *Using the Container components* on page 85.

General tab

The settings on the General tab let you specify the basic settings for the component.

Title

Type a title for the component or click the adjacent cell selector button to select a title from the spreadsheet.

Tab Alignment

Click the drop-down menu to select an alignment option for the tabs in the component.

Note: This option is only available for the Tab Set component.

Label

Type a label for the component or click the adjacent cell selector button to select a label from the spreadsheet.

Note: This option is only available for the Canvas sub-component.

Behavior tab

The settings on the Behavior tab let you customize how the component will behave when the visualization is run.

Common tab

Scroll Bar options

- Horizontal Scroll Bar

  Click the drop down menu to select one of the following options for displaying the horizontal scroll bar:

  - Off
  - On
  - Auto (default)

- Vertical Scroll Bar

  Click the drop down menu to select one of the following options for displaying the vertical scroll bar:

  - Off
  - On
  - Auto (default)

Note: This setting is not available for the Tab Set component.

Selected Item

Click the Item drop-down menu to select the default Tab that will be loaded when the visualization is run.

Note: This setting is only available for the Tab Set component.

Dynamic Visibility

For information on the options available in the Dynamic Visibility area see *Dynamic Visibility* on page 239.

Note: This setting is not available for the Canvas sub-component.

Animations and Effects tab

For information about the features in the Animations and Effects tab, see *Animations and Effects tab* on page 240.

Appearance tab

The features on the Appearance tab let you customize the appearance of the Container components.

Text tab

For more information about the settings on the Text tab, see *Text tab* on page 234.

Note: This tab is not available for the Canvas sub-component.

Color tab

Use this area to customize the color of various parts of the component. The available elements will be listed with an adjacent color selector button; click this button to customize the color of the element.

The following elements may be available, depending on the component:

- Background Color
- Panel Color
- Scroll bar
  - Track Color
  - Thumb Color
  - Button Color
  - Button Symbol Color
- Tab Backgrounds
  - Default Color
  - Over Color
  - Selected Color
- Labels
  - Default Color

- Over Color
- Selected Color

Selector Components Reference

chapter 16

Overview

This section discusses the Properties panel features for Selector components. The following Selector components are available in all versions of Xcelsius 2008:

- Check Box
- Combo Box
- Fisheye Picture Menu
- Icon
- Label Based Menu
- List Box
- Radio Button
- Toggle Button
- Spreadsheet Table

In addition, Xcelsius Engage versions also have the following components:

- Accordion Menu
- Filter
- Sliding Picture Menu
- List View
- List Builder
- Ticker
- Play Selector

For more information about Selector components, see *Using the Selector components* on page 89.

General tab

Title

Type in the Title box or click the adjacent cell selector button to select the title for the component.

Note: This option is not available for Icon, Toggle Button, Spreadsheet Table, and Play Selector components.

Labels

Click the Manual Edit button adjacent to the Labels box to manually enter the labels, or click the adjacent cell selector button to select the labels from the spreadsheet.

Note: The Labels options are not available for the following components:

- Accordion Menu
- Check Box
- List View
- Spreadsheet Table
- Play Selector
- Filter

Note: The Labels Manual Edit button is not available for the Icon component.

Value Labels

Click the cell selector button adjacent to the Value Labels box to select the values that will be displayed as labels on the Ticker component.

Note: This option applies only to the Ticker component.

Display Data

Click the cell selector button adjacent to the Display Data box to select the range of data that is displayed on the component.

Note: The Display Data area applies only to the Spreadsheet Table and List View components.

Display Value

Enter the value or click the cell selector button adjacent to the Display Value box to select a cell containing the value. The value is displayed when the pointer hovers over the component.

Note:

- The value must be numeric. If the value is non-numeric, a zero will be displayed.
- This option is only available for the Icon component.

Images

The options in this section set the image files used in the selector.

Embedded

Select Embedded to embed the image files in the selected component. The selected files will become a part of the exported visualization.

1. Click **Import** to open the Import Thumbnail dialog box.
2. Click the **Click to Add Images** button ro launch the Open File dialog box.
3. Navigate to the image file you want to embed, then click **OK**.
4. Click **OK** to return to the Properties panel.

By URL

Click By URL to manually enter the image file locations. Click the Manual Edit button to type the URL of the images or use the cell selector button to link to a cell in the spreadsheet.

Note: The Images options apply only to Fisheye Picture Menu and Sliding Picture Menu components.

Data Insertion

The options in this area define the data for the Selector components and how the components will behave when a selection is made.

Note: The Ticker component can be used as a display component or a selector component. Select the Enable Data Insertion check box to enable data insertion options for the Ticker component.

Insertion Type

The options on this list determine the structure of the data that is inserted when a selection is made. There are six options:

- Position

  A target cell is linked to the selector component. When a selection is made on the selector component the position value of the selection is entered in the target cell.

  For example, if the second item in the list is selected, the number two (2) will be inserted in the target cell.

- Label

  A target cell is linked to the selector component. When a selection is made on the selector component the label of the selection is entered in the target cell.

  For example, if the user selects **B** from options A, B, and C, the label **B** will be inserted into the target cell.

- Value

  A target cell is linked to the selector component. The selector labels are each associated with a value in the spreadsheet. When a selection is made on the selector component the source data value of the selection is entered in the target cell.

- Row

  A target row is linked to the selector component. The selector labels are associated with a range of data organized in rows. When a selection is made on the selector component, the corresponding row of data values is entered in the target row.

- Column

  A target column is linked to the selector component. The selector labels are associated with a range of data organized in columns. When a selection is made on the selector component, the corresponding column of data values is entered in the target column.

- Filtered Rows

  A target range of cells is linked to the selector component. The selector labels are associated with a range of data organized in rows. When the label is selected on the selector component, only the rows that correspond

with that label are inserted in the target rage. For this option, each label may have more than one row of corresponding data.

- Status List

  A target range of cells is linked to the selector component. When a selection is made on the selector component a value of 1 is entered in the cell of the target range representing that selection, and a value of 0 is entered in the other target cells in the range.

  For example, if the second of three options is selected, the values 0, 1, and 0 will be inserted into the target range.

Note: The destination cells must be empty.

Source Data

Click the cell selector button adjacent to the Source Data box to select the source data range that the selector will insert into the Destination range.

Note: For Check Box, Icon, and Toggle Button components, click the Manual Edit button to enter the Source Data values manually, or to modify the default values.

Destination

Click the cell selector button adjacent to the Destination box to select the target cell or range of cells into which the selected source data is inserted.

Note: The required size of the Destination range will vary according to the Insertion Type selected. For Insertion Types that use columns or rows of data, be sure to select a Destination range that is large enough to contain your largest column or row of data.

Orientation

Select an orientation for the selector:

- Horizontal
- Vertical

Note: The Orientation option is only available for Label Based Menu and Radio Button components.

Specific to the Filter component

Display Options

This area controls the number of combo boxes displayed for the selected Filter component.

Number of Filters

Adjust the value displayed in the Number of Filters box to adjust the number of filters displayed on the Filter component.

Specific to the List Builder component

Source List

Type in the Source List box or click the adjacent cell selector button to select the title to be displayed above the list of items that can be selected.

Destination List

Type in the Destination List box or click the adjacent cell selector button to select the title to be displayed above the list of items that have been selected.

Labels

Click the Manual Edit button adjacent to the Labels box to manually enter the labels, or click the adjacent cell selector button to select the labels that will populate the source list.

Add Button

Type in the Add Button box or click the adjacent cell selector button to select the label displayed on the Add button in the List Builder component.

When the user clicks the Add button, the highlighted item is moved from the Source list to the Destination list.

Remove Button

Type in the Remove Button box or click the adjacent cell selector button to select the label displayed on the Remove Button.

When the user clicks the Remove button, the highlighted item is moved from the Destination list to the Source list.

Update Button

Type in the Update Button box or click the adjacent cell selector button to select the label displayed on the Update Button.

When the user clicks the Update Button, the selections in the Destination list and their corresponding data are inserted in the spreadsheet.

Specific to the Accordion Menu component

Categories

Select a category to edit from the list. Click the plus or minus buttons to add or delete a Category in the list. Click the up or down arrow to change the Category's position in the list.

- Name

  Enter a name for the highlighted Category or use the adjacent cell selector button to select a cell from the spreadsheet.

- Labels

  Click the cell selector button to select the labels within the highlighted category from the spreadsheet.

- Source Data

  Click the cell selector button to select the range of data that corresponds to the Labels within the highlighted Category.

- Category Label Destination

Click the cell selector button to select the destination cell for the Category Name.

Behavior tab

The features in the Behavior tab determine how the selector component behaves when the visualization is run.

Common tab

Interaction Options

The options in this section determine how the component behaves when the user interacts with it. Not all options are available for all components.

Insert On

The options on this list define how the component recognizes that a selection has been made. The following options are available:

- Mouse Click

  Data is displayed when the user clicks on the selector component.

- Mouse Over

  Data is displayed when the user moves the pointer over the selector component.

Selected Item

Use the Selected Item list to designate the default selection for the component when the visualization is run.

- Category

  Select the category from the drop-down menu.

  This option is only available in the Accordion Menu component.

- Item

Select an item from the list or click the cell selector button to link to a dynamically updated item.

Note: This option is not available in the Filter or List Builder components.

Ignore Blank Cells

Ignore Blank Cells prevents the cells past the last non-empty Label from being shown in the component. This option is useful when you need the number of selections within the component to be variable.

Note: Ignore End Blanks does not apply to Check Box, Icon, Toggle Button, or List Builder components. For more information, see *Ignore End Blanks for variable length ranges* on page 146.

Dynamic Visibility

For information on the features available in the Dynamic Visibility area, see *Dynamic Visibility* on page 239.

Animations and Effects tab

For information about the features in the Animations and Effects tab, see *Animations and Effects tab* on page 240.

Specific to the Label Based Menu component

Always Expanded

Check **Always Expanded** to statically display all of the selections contained on the menu. If this option is not selected, the Insert On option is disabled and several other options are enabled.

Expand On

This options defines the action that will trigger the component to expand:

- Mouse Click
- Mouse Over

Expand Direction

This option defines the direction the menu will expand once it is opened.

Note: Expand Direction options are only available when Orientation is selected on the General tab.

When the Orientation is Horizontal, the following options are available on the Expand Direction list:

- Left
- Right

When the Orientation is Vertical the following options are available on the Expand Direction list:

- Center Down
- Left Down
- Right Down
- Center Up
- Left Up
- Right Up

Open Animation

Use Open Animation to animate the opening of the component.

Specific to the Sliding Picture Menu component

Slider method

The options on this list control how the Sliding Picture Menu scrolls through the thumbnails. The following are the available options:

- Buttons

The user must click on the buttons to scroll through the thumbnails.

- Mouse

  The Sliding Picture Menu will scroll through the thumbnails as the user moves the mouse.

Slider amount

The options on this list control the scrolling behavior of the Sliding Picture Menu. The following are the available options:

- One

  The Sliding Picture Menu will scroll through the thumbnails one at a time.

- Page

  The Sliding Picture Menu will scroll through the thumbnails a page at a time. The number of thumbnails per page is determined by the width of the component.

Scroll Speed

Adjust the Scroll Speed slider to control the speed of the slide behavior as the user scrolls through the Sliding Picture Menu thumbnails.

Specific to the Spreadsheet Table component

Row selectability

The options in this area configure whether the rows of a Spreadsheet Table component are selectable.

Row

Check the box adjacent to **Row** to enable row selection for all rows of the table. Clear the box to prevent all rows from being selected.

Check the box adjacent to each row to enable row selection for the row highlighted.

Specific to the Ticker Component

Item Separator

Enter a character in the Item Separator box to change the separator between each item.

Scroll Direction

Click the Scroll Direction list to set the direction the scroll will move:

- Left
- Right

Scroll Speed

Adjust the Scroll Speed slider to change the speed of the scroll.

Specific to the Accordion Menu component

Slide Speed

Adjust the Slide Speed slider to customize how fast the Categories expand when clicked.

Specific to the Play Selector Component

Play Time

Adjust the value in the Play Time box to control the length of time the sequence will play.

Auto Play

Click Auto Play to have the component automatically play when the visualization is loaded.

Auto Rewind

Click Auto Rewind to have the sequence automatically rewind after playing.

Auto Replay

Click Auto Replay to have the sequence automatically replayed after playing.

Specific to the Fisheye Picture Menu component

Zoom Size

Adjust the Zoom Size slider to change the size of the fisheye popup effect on mouse-over.

Zoom Speed

Adjust the Zoom Speed slider to configure the speed of the fisheye popup effect on mouse-over.

Appearance tab

The features on the Apperanace tab let you customize the appearance of the Selector component.

Layout Tab

The options in this section configure the layout of component properties.

Note: The Layout tab is not available in the Accordion Menu, List Builder, or Check Box components.

Image Sizing

The options in this area apply only to the Fish-Eye Picture and Sliding Picture Menu components.

The following options configure the image sizing behavior of the thumbnail images for the menu:

- Sizing Method

  Click an option from the list to set the sizing method of the thumbnail images for the menu. The following options are available:

  - **Scale**

    The image will scale down to fit into the thumbnail area. The aspect ratio of the image will be preserved.

  - **Stretch**

    The image will be sized to fit inside of the thumbnail area.

- Height

  Enter or adjust the value in the Height box to set the height of the thumbnail images.

- Width

  Enter or adjust the value in the Width box to set the width of the thumbnail images.

Thumbnails

The options in this area apply only to the Fish-Eye Picture Menu and Sliding Picture Menu components.

The following options are available:

- Horizontal Margin

  Adjust the value in the Horizontal Margin box to set the horizontal spacing between thumbnail images.

- Vertical Margin

  Adjust the value in the Vertical Margin box to set the vertical spacing between thumbnail images and the area border.

Number of Labels Displayed

Enter or adjust the value in the Number of Labels Displayed box to control the number of labels that appear in the drop-down list.

Note: This option applies only to the Combo Box and Filter components.

Transparency

For more information on Transparency, see *Transparency* on page 234.

Filter Gap

Adjust the value in the Filter Gap box to set the amount of space displayed between the dropdowns on the Filter component.

Note: This option applies only to the Filter component.

Markers

Marker options are only available for the Radio Button component. The following can be adjusted:

- Marker Size

  Enter or adjust the value in the Marker Size box to specify the size of the radio button markers.

- Horizontal Margin

  Enter or adjust the value in the Horizontal Margin box to control the amount of space between the left and right edges of the background and the radio buttons and labels.

- Vertical Margin

  Enter or adjust the value in the Vertical Margin box to control the amount of space between the top and bottom edges of the background and the radio buttons and labels.

Enable Background

Select the Enable Background box to display the background of the component.

Note: This option applies only to the Radio Button component.

Show Ticker Background

Select the Show Ticker Background box to display the ticker background..

This option applies only to the Ticker component.

Button Separation

Enter or adjust the value in the Button Separation box to control the amount of space between buttons.

Note: This option applies only to the Label Based Menu component.

Auto Replay

Click the box adjacent to each play selector element you want to display:

- Show Background
- Show Progress Indicator
- Show Rew/Fwd
- Show Prev/Next

Note: Auto Replay is only available for the Play Selector component.

Show Gridlines

Click Show Gridlines to enable the grid display.

Note: Selecting the Show Gridlines option only displays a grid for cells that do not have a cell border or a cell pattern specified in the spreadsheet.

Note: This option available only for the Spreadsheet Table component.

Gridlines

- Click **Show Vertical Gridlines** to display vertical gridlines.

  Use the adjacent color selector to customize the color of the vertical gridlines.
- Click **Show Horizontal Gridlines** to display horizontal gridlines.

Use the adjacent color selector to customize the color of the horizontal gridlines.

Note: This option is available only for the List View component.

Custom Column Widths

Click Custom Column Widths to set the width of columns.

Note: This option is available only for the List View component.

Text tab

Show-Text selection box

Select the box in the Show column next to a text element to display that element on the component. One or more of these elements may be available, depending on the component type:

- Title
- Source List Title
- Source List Labels
- Destination List Labels
- Destination List Title
- Destination List Labels
- Button Labels
- Header
- Category Names
- Labels
- Display Value

The following parameters apply to the text element that is selected, indicated by a blue highlight in the Show Text selection box.

- Text Settings

  For information about text settings, including font, size, alignment, and color, see *Format Selected Text* on page 235.

- Position

For information about the Position list, see *Position* on page 236.

- Offset X

  For information about the Offset X box, see *Offset X* on page 236.

- Offset Y

  For information about the Offset Y box, see *Offset Y* on page 237.

- Number Format

  For information about the features in the Number Format area, see *Number Format* on page 237.

Color tab

Use the color selector buttons to customize the appearance of the component. The parts of the component that can be customized vary depending on the component you are working with. The following options may be available:

Note: Color selector buttons are disabled for the Icon component when Alerts are enabled.

Buttons

- Button Color
- Symbol Color
- Pressed Button Color
- Pressed Symbol Color

The following apply only to the Accordion and Sliding Picture Menu components:

- Disabled Symbol Color
- Disabled Button Color

The following apply only to the List Builder component:

- Button Label Color
- Pressed Button Label Color

The following apply only to the Toggle Button component:

- On Color
- Off Color

Category Background

These options apply only to the Accordion Menu component.

- Default Color
- Over Color
- Selected Color

Category Names

These options apply only to the Accordion Menu component.

- Default Color
- Over Color
- Selected Color

Destination List Labels

These options apply only to the List Builder component.

- Default Color
- Over Color
- Selected Color

Destination List Labels Backgrounds

These options apply only to the List Builder component.

- Default Color
- Over Color
- Selected Color

Display Values

These options apply only to the Ticker component.

- Default Color
- Order Color
- Selected Color

Drop-Down Button

- Button Color
- Arrow Color
- Selected Button Color
- Selected Arrow Color

Header Background

These options apply only to the List View component.

- Default Color
- Over Color
- Selected Color

Header Labels

These options apply only to the List View component.

- Default Color
- Over Color
- Selected Color

Label

- Default Color
- Mouse Over Color
- Selected Color

The following options only to the Toggle Button component:

- On Color
- Off Color

Label Backgrounds

- Default Color
- Over Color
- Selected Color

Marker

These options apply only to the Radio Button component.

- Default Color
- Selected Color

Progress Indicator

These options apply only to the Play Selector.

- Marker Color
- Track Color

Rows

These options apply only to the Spreadsheet Table component.

- Over Color
- Selected Color

Scroll Bar

- Track Color
- Thumb Color
- Button Color
- Button Symbol Color

Source List Backgrounds

These options apply only to the List Builder component.

- Default Color
- Over Color
- Selected Color

Source List Labels

These options apply only to the List Builder component.

- Default Color
- Over Color
- Selected Color

Sort Symbol

This option applies only to the Ticker component.

- Symbol Color

Thumbnails

These options apply only to the Fish-Eye Picture Menu and Sliding Picture Menu.

- Default Color
- Over Color
- Selected Color

Other

- Gridline Color
- Vertical Gridlines
- Horizontal Gridlines
- Unchecked Color
- Checked Color

- Background Color
- Label Header Color

Alerts tab

For information on the features available on the Alerts Tab, see *Alerts Tab* on page 241.

Note: The Alerts Tab applies only to the following Selector components:

- Ticker
- Label Based Menu
- Combo Box
- List Box
- List Builder
- Icon

Single Value Components Reference

chapter 17

Overview

This section discusses the Properties panel features for Single Value components. The following Single Value components are available in all versions of Xcelsius 2008:

- All Dials
- All Gauges
- All Sliders
- All Progress Bars
- Play Control
- Spinner
- Value

For more information about Single Value components, see *Using the Single Value components* on page 107.

General tab

The features on the General tab let you link the single value component to data.

Title

To give the single value component a title, type the desired title in the Title text box. Alternatively, you can click the Title cell selector button, and select a title in the spreadsheet.

Data

To provide the single value component with data, you can enter the value manually in the Data box. Alternatively, you can click the Data cell selector button to link the single value component to a cell in the embedded spreadsheet.

Specific to Dual Slider components

This section applies only to the Dual Slider components.

Low Value

Low Value lets you specify the default value for the left pointer on the Dual Slider component. To enter the low data value manually, type the desired value in the Low Value box. Alternatively, you can click the Low Value cell selector button to select the value in the spreadsheet.

High Value

High Value lets you specify the default value for the right pointer on the Dual Slider component. To enter the high data value manually, type the desired value in the High Value box. Alternatively, you can click the High Value cell selector button to select the value in the spreadsheet.

Scale

The Scale area provides several methods for setting upper and lower limits in single value components, and ensuring that the initial values are within the limits. Depending on the component that you are working with, some of these options may be unavailable:

Manual

Select Manual to enter the limits manually.

Enter the minimum and maximum limits in the boxes, or use the cell selector button to link the values to cells in the spreadsheet.

Auto

Select Auto to have the minimum and maximum limits are automatically calculated based on one of the following selections:

Note: This option is unavailable for Play Control, Spinner, Dual Slider, and Value components. Limits for these components must be entered manually.

- Value Based

The limits comprise a range around the value.

- Zero Based

  The limits comprise a range that uses the value as the upper limit and zero as the lower limit.

- Zero Centered

  The limits comprise a range that includes the value and its negative, with zero at the centerpoint.

- Alert Based

  The limits comprise a range based on the selected Alert method..

Behavior tab

The features on the Behavior tab determine how the Single Value component behaves when the visualization is run.

Common tab

The features in this section appear on the Common tab of the Behavior tab for single value components. Depending on the component that you are working with, some of these features may be unavailable.

Movement

You can control the movement of sliders, needles and progress bars. There are three options for controlling movement:

- Increment

  Use the Increment box to restrict values to a determined increment. Enter the desired increment in the Increment box, or click the Increment cell selector button to bind the value to a cell in the embedded spreadsheet.

  Note: Increment is the only setting available in this section for the Spinner, Value and Play Control components.

- Major Ticks

Select this option to have progress move incrementally only on major ticks.

- Major and Minor Ticks

  Select this option to have progress move incrementally on major and minor ticks

Limits

The Minimum Limit and Maximum Limit lists each provide three options for setting the behavior of the minimum and maximum values on the single value component. Depending on the component that you are working with, some of these options may be unavailable:

- Fixed

  The user cannot set the value to a number less than the minimum value or greater than the maximum value.

- Adjustable

  The user can adjust the value limits when the visualization is run. This option is available for all components except the Value component.

- Open

  The user can set the value to any number that does not conflict with the specified minimum or maximum value.

Note: Limit behavior options are not available for the Play Control component.

Interaction Options

The features in this section determine how the end user can interact with the visualization.

Note: The settings in this area do not apply to Slider or Progress Bar components.

Auto Resize

Select the Auto Resize check box to enable the component to automatically resize and fit the number displayed.

Note: The Auto Resize check box is available for Value components, and is the only setting available in this section for Spinner components.

Mouse Sensitivity

The Mouse Sensitivity slider determines how sensitive the value of the component is to pointer movements. When the setting is high, small pointer movements can change the value by large increments. When the setting is low, pointer movements change the value by small increments.

Note: The Mouse Sensitivity slider is available for Value, Gauge, and Dial components.

Object Elasticity

The Object Elasticity slider determines the elasticity of the movement of the needle. If you select Less elasticity, the needle will snap to the new value. If you select More elasticity, the needle will bounce around the new value and finally settle in place.

Note: This option is only available for Gauge components.

Mouse Tracking

Click one of the options under Mouse Tracking to specify the direction that the user must drag the pointer to change the value on a component:

- Vertical

  The user must move the pointer vertically (up or down) to change the value.

- Radial

  The user must move the pointer in a circular motion to change the value.

Note: The Mouse Tracking options are available for Gauge and Dial components only.

Scroll Behavior

The Scroll Behavior determines the action the user must perform to change the value.

- Manual

The user must drag the pointer above or below the component to change the value. For each increment of change, the user must continue to drag the pointer,

- Auto

  The user can drag the pointer and place it above or below the value component to change the value. The value will automatically continue to change while the mouse button is held, without requiring further pointer movement.

Note: This option is only available for Value components.

Enable Play Button

The Enable Play Button check box controls the visibility of the play button for the component. When the user clicks the Play Button in the visualization, the component will sequence from the minimum value to the maxium value, at the increments set for the component.

Click the check box to enable the Play Button and make the following configuration options available:

Note:

- These options are not available for Dual Slider or Spinner components.
- These options are automatically enabled for the Play Control component.

Auto Play

The Auto Play check box controls whether the play sequence for the component automatically plays when the visualization is loaded.

Note: This option is only available for the Play Control component.

Play Time

The Play Time box lets you set the duration of the play sequence in seconds. You can enter a value from 1 to 100, with 1 being the shortest duration, and 100 being the longest duration.

Auto Rewind

The Auto Rewind check box controls whether the play sequence for the component automatically rewinds to the minimum value.

Auto Replay

The Auto Replay check box controls whether the play sequence for the component automatically replays.

Dynamic Visibility

For information about the features in the Dynamic Visibility area, see *Dynamic Visibility* on page 239.

Animations and Effects tab

For information about the features in the Animations and Effects tab, see *Animations and Effects tab* on page 240.

Appearance tab

The features on the Appearance tab let you customize the appearance of the Single Value component.

Layout tab

The features in this section control how the tick marks and other layout options will appear in the visualization.

Enable Ticks

The Enable Ticks check box controls the visibility of ticks (the small markers that indicate values) for the component. When you select Enable Ticks, the following options for customizing the appearance of the ticks are available:

- Auto Scale

Select this option to automatically scale the ticks according to the data.

- Manual

  Select this option to manually set the appearance of ticks:

  - Number of Ticks
    - Major

      The Major box lets you specify the number of large ticks displayed for the component. You can enter a value from 2 to 21 or use the cell selector to link the value to a cell in the spreadsheet.

    - Minor

      The Minor Ticks box lets you specify the number of small ticks displayed between the large ticks. You can enter a value from 0 to 21 or use the cell selector to link the value to a cell in the spreadsheet.

  - Size of Divisions
    - Major

      The Major box lets you specify the size of the distance between the large ticks displayed for the component. You can enter a value from 0 to 100 or use the cell selector to link the value to a cell in the spreadsheet. Higher values will result in larger distances between ticks.

    - Minor

      The Minor box lets you specify the size of the distance between the small ticks displayed for the component. You can enter a value from 0 to 100 or use the cell selector to link the value to a cell in the spreadsheet. Higher values will result in larger distances between ticks.

Note: The size of the Minor Divisions is not dependant on the size of the Major Divisions.

Radial Definition

This section applies to Dial and Gauge components only.

- Minimum Angle

The Minimum Angle box lets you specify the minimum angle the needle can rotate to.

Note: Minimum Angle is unavailable if you chose Open from the Minimum Limit dropdown on the Behavior tab.

- Maximum Angle

  This option is available for gauge and dial components only. The Maximum Angle box lets you specify the maximum angle the needle can rotate to.

  Note: Maximum Angle is unavailable if you chose Open from the Minimum Limit dropdown on the Behavior tab .

Show Background

Check this box to display fill the background of the component.

Note: This option is available only for the Value component.

Layout Options

Select the checkbox next to each component part you want to display:

- Show Rew/Fwd
- Show Prev/Next
- Show Slider

Note: The options in this section apply only to the Play Control component.

Text Tab

Show-Text selection box

Select the box in the Show column adjacent to each text element you want to display on the component. The following text elements are available:

- Title
- Value
- Limits

Note: The Limits text element is not available for Spinner, Play Control, or Value components.

Format Selected Text

The following parameters apply to the text element that is highlighted in the Show-Text selection box.

- Text Settings

  For information about text settings, including font, size, alignment, and color, see *Format Selected Text* on page 235.

- Position

  For information about the Position list, see *Position* on page 236.

- Offset X

  For information about the Offset X box, see *Offset X* on page 236.

- Offset Y

  For information about the Offset Y box, see *Offset Y* on page 237.

- Number Format

  For information about the features in the Number Format area, see *Number Format* on page 237.

Color tab

The following are items that may be available for color customization, depending on the component you are working with. Click the color selector button adjacent to the item to change its color.

- Low Marker Color
- High Marker Color
- Track Color
- Background Color
- Up Button/Down Button
  - Button Color
  - Symbol Color

  - Pressed Button Color
  - Pressed Symbol Color
- Play Button Color
- Play Symbol Color
- Marker Color
- Limits Background
- Needle Color
- Frame Color
- Center Color
- Tick Color
- Grip Color

Alerts tab

For information about the features on the Alerts tab, see *Alerts Tab* on page 241.

Map Components Reference

chapter 18

Overview

This section outlines Properties panel features for Map Components. The following Map components are available in all versions of Xcelsius 2008:

- Africa by Country
- Asia by Country
- Asia Pacific Large by Country
- Central America by Country
- European Union by Country
- Europe Large by Country
- Europe Small by Country
- North America by Country
- European countries by province
- Asian countries by province
- California by County
- World by Continent

For more information, see *Using the Map components* on page 111.

General tab

The features on the General tab link the map component to data in the spreadsheet.

Title

To give the map component a title, type the title in the Title box. Alternatively, you can click the Title cell selector button and select a title in the spreadsheet.

Region Keys

Region Keys defines the codes used for each region in the map component. These codes are used by Display Data, Source Data, and Destination Data

to associate values to the appropriate region parameters. You can specify region codes in one of the following ways:

- If you want to use region codes from the embedded spreadsheet, click the Region Keys cell selector button and select the cells that contain the region codes.
- If you want to manually enter region codes, click the Region Keys Manual Edit button. In the Region Key column of the Region Keys dialog box, type the region codes.

Display Data

The Display Data cell selector button lets you select the display data for the map component in the spreadsheet. When a user selects a region on the map component, the relevant data is displayed.

Depending on the layout of the Display Data range, Xcelsius 2008 searches for the region codes specified in Region Keys in the following ways:

- If the data range has two columns and more than two rows, Xcelsius 2008 searches for the codes in the first column of the range.
- If the data range has two rows and more than two columns, Xcelsius 2008 searches for the codes in the first row of the range.
- If the data range has two columns and two rows, Xcelsius 2008 searches the first row and the first column to determine which one has the most region codes. Xcelsius 2008 then uses either the first row or the first column for region codes.

Depending on the location of the region codes, Xcelsius 2008 retrieves relevant Display Data in the following ways:

- If the region codes are in the first column, Xcelsius 2008 interprets the data to the right of the region codes as the display data.
- If the region codes are in the first row, Xcelsius 2008 interprets the data below the region codes as the display data.

Insertion Type

The items on the Insertion Type list determine how Xcelsius 2008 inserts data for a selected region:

- Rows

  Xcelsius 2008 inserts the relevant data into a row of empty cells.

- Columns

  Xcelsius 2008 inserts the relevant data into a column of empty cells.

Source Data

The Source Data cell selector button lets you link the source data in the spreadsheet to the map component.

Destination

The Destination Cell Selector button lets you select a range of empty cells in the spreadsheet for Xcelsius 2008 to insert data into. When a user selects a region on the map component, the relevant data is inserted into the empty cells.

If you chose Rows from the Insertion Type list, you must select a row of empty cells with the same number of cells as a row in the source data range. If you chose Columns from the Insertion Type list, you must select a column of empty cells with the same number of cells as the largest column in the source data range.

Behavior tab

The features on the Behavior tab control how the map component behaves in its interactive format.

Common tab

- Interaction Options

  Select from the dropdown to set how the user will make a data selection:
  - Mouse Click
  - Mouse Over

- Default Selected Region

  Select a region from the drop-down menu. This region will be selected by default when the visualization runs.

- Dynamic Visibility

  For information on the options available in the Dynamic Visibility area, see *Dynamic Visibility* on page 239

Animations and Effects tab

For information on the options available on the Animations and Effects tab, see *Animations and Effects tab* on page 240

Appearance tab

The features on the Appearance tab let you customize the appearance of the map component.

Layout Tab

Transparency

Use the slider to set the transparency of the component. A value of 100 means the component is 100% transparent.

Text Tab

Show-Text selection box

Select the box in the Show column next to a text element to display that element on the component. The following parameters apply to the text element that is highlighted in the Show-Text selection box.

- Text Settings

  For information about text settings, see *Text tab* on page 234.

- Position

  For information about the Position list, see *Position* on page 236.

- Offset X

  For information about the Offset X box, see *Offset X* on page 236.

- Offset Y

  For information about the Offset Ybox, see *Offset Y* on page 237.

- Number Format

  For information about the features in the Number Format area, see *Number Format* on page 237

Color Tab

Use the Color Selector button adjacent to each of the options listed here to change its color:

- Default Color

  The default color for unselected regions and for regions which have no source data.

- Over Color

  The color for regions when the mouse pointer is placed over them.

- Selected Color

The color for selected regions.

- Selectable Color

  The color for selectable regions and for regions which have source data.

- Border Color

  The color for region borders.

Alerts tab

For information about the features on the Alerts tab, see *Alerts Tab* on page 241.

Art and Background Components Reference

chapter 19

Overview

This section discusses the Properties panel features for Art and Background components. The following Art and Background components are available in all versions of Xcelsius 2008:

- All Backgrounds
- Image Component
- Rectangle
- Ellipse
- Horizontal Line
- Vertical Line

For more information about Art and Background components, see *Using the Art and Background components* on page 127.

General tab

The features in this section apply to specific component types.

Common to some components

This section applies to the Background and Image components.

Block Mouse Events

The Block Mouse Events check box uses the background component to prevent users from interacting with other components. This feature only works if, in the design view, the background component has been layered on top of the other components.

If you select Block Mouse Events, any actions that users perform on the underlying components with their pointers have no effect.

If you clear Block Mouse Events, users can interact with the underlying components.

Note: Block Mouse Events is enabled for imported SWF files even if it is cleared on the General tab.

Specific to Background components

The features in this section apply to the Background components:

Border Scale

The Border Scale slider lets you adjust the width of the background component's border. When you drag the pointer to the right, the border becomes thicker. When you drag the pointer to the left, the border becomes thinner.

Specific to Shape components

The features in this section apply to the following components:

- Ellipse
- Rectangle

Enable Border

Selecting the Enable Border check box makes the shape component border visible, and provides the following options for customizing the appearance of the border:

- Color. Click the color selector button to choose a border color.
- Thickness. Type or edit the value in the Thickness box to set the width of the border.
- Transparency. Use the slider to set the Transparency of the border.

  For information about the Transparency box, see *Transparency* on page 234.

Fill

The items on the Type list determine the fill color and shading of the shape component:

- None. The shape component has no fill.
- Solid. The fill is a solid color.
- Linear (gradient). The fill changes colors as you move from one side of the shape component to the other.
- Radial (gradient). The fill changes colors as you move from the center of the shape component to the edge.

Fill Settings

Selecting Linear, Radial, or Solid from the Type list provides the following options for customizing the appearance of the fill:

- Color

  The color selector button lets you select the fill color.

  Note: The fill color is also the gradient color.

- Transparency

  Use the slider to set the Transparency of the solid fill color or the active gradient color.

  For information on Transparency, refer to *Transparency* on page 234.

- Gradient Preview



  The Gradient Preview determines how the gradient transitions between two or more colors. It is available only if you selected Linear or Radial from the Type list.

  The default gradient uses with the fill color on the left, then transitions to black on the right. Move the gradient color markers (indicated by a black

triangle on the marker below the gradient color) to change where the gradient begins and ends in the component.

Change a gradient color's properties by selecting its marker and modifying the Fill and Transparency.

To add a gradient color, hover the mouse over Gradient Preview where you would like to add the new color, then click on the plus sign that appears.

To remove a gradient color, drag its marker down and away from Gradient Preview.

- Rotation

  The Rotation box is available only if you selected Linear from the Type list. You can enter a value from 0 to 360 in the Rotation box to determine the position of the gradient axis.

Specific to Line components

The features in this section apply to the following components:

- Vertical Line
- Horizontal Line

Line Color

The color selector button adjacent to Line Color lets you select the color of the line component.

Specific to the Image component

The features in this section apply to the image component only. For more information, see *How to use the Image component* on page 128.

Note: The image component supports JPEG and SWF files, as well as Xcelsius 2008 models. However, it does not support these file types:

- Progressive JPEG

- JPEG with CMYK coloring
- Nested SWF files

Import

The Import button lets you browse for an image file. When you select an image file to import, the file name appears in the Filename box.

Resize Image to Component

When you check the Resize Image to Component check box, Xcelsius 2008 scales the imported file to the size of the image component on the canvas. When you clear this check box, the JPG or SWF file you import appears in its actual size.

Embed File

The Embed File check box lets you embed a copy of the image file in the Xcelsius 2008 model. If you select Embed File, the image file becomes part of the Xcelsius 2008 model. If you clear Embed File, Xcelsius 2008 loads the image file when the model is viewed in its interactive format.

Hide SWF Background Color

The Hide SWF Background Color check box is available only if you imported a SWF file. This check box controls whether the background of the SWF file is displayed in the image component. Selecting Hide SWF Background Color makes the SWF file background invisible.

Behavior tab

Common tab

- Dynamic Visibility

  For information about the features in the Dynamic Visibility area, see *Dynamic Visibility* on page 239.

Animations and Effects tab

For information on Animations and Effects, see *Animations and Effects tab* on page 240.

Text Components Reference

chapter 20

Overview

This section discusses the Properties panel features for Text components. The following Text components are available in all versions of Xcelsius 2008:

- Input Text Area
- Input Text
- Label

For more information, see *Using the Text components* on page 113.

General tab

Default Text

Link to Cell

Use the Link to Cell cell Selector button to link the label to a cell in the spreadsheet. Any change to the value of this cell will be reflected in the component.

Enter Text

Use this option to manually enter the default text that will appear when the visualization is run.

Enable HTML Formatting

This option applies only to the Label and Input Text Area components.

Check this box to enable the use of HTML code for text formatting.

Data Insertion

Insert Data on Load

This option applies only to Input Text and Input Text Area components:

Select the Insert Data on Load check box to insert the default text into the Destination cell once the generated application is loaded.

Destination

This option applies only to Input Text and Input Text Area components:

Use the cell selector button to select the spreadsheet cell into which the text will be inserted.

Specific to Label

Use Spreadsheet Formatting

Check this box to display the label with the formatting that has been applied in the spreadsheet.

Behavior tab

Common tab

Input Options

Enable Password Protection

Select the Enable Password Protection check box to display typed characters as asterisks (*). This feature can be used to prevent passwords or other sensitive information from being displayed on screen.

Note: This option is only available for the Input Text component.

Maximum Number of Characters

When the Maximum Number of Characters check box is enabled, this value sets the maximum number of characters that a user can enter into the label. Enter the desired value in the text box, or use the up/down arrows to adjust the maximum number of characters.

Note: This option is not available for the Label component.

Characters Allowed

Use this field to prevent users from entering certain characters into the label. All characters will be allowed if the field is left blank. You can manually enter the characters allowed in the Characters Allowed box or you can click the cell selector button to select the values in the spreadsheet.

The simplest expression is a single character, such as "a", which will allow users to enter the letter "a" into the label. Multiple expressions may be concatenated to create larger groups of allowed or not allowed characters. For example, the expression "abc" will allow the letters "a", "b", and "c" to be entered into the label by users.

The dash (-) can also be used to define a range of characters. The expression "a-z", for example, defines all lowercase letters.

When there are only a few characters that you do not want to be allowed, it is easier to specify those characters instead of all of the allowed characters.

This can be done by prefixing the entire field with the caret (^). Every character other than those specified in the field is then allowed.

For example, to prevent users from entering numbers, the field could be set to "^0-9".

The caret can also be used throughout the string to switch between allowing and excluding characters. The first time it appears in the field, the characters defined by the expressions that follow it will not be allowed until another caret appears. When a second caret appears, the characters defined by the expressions that follow it will be allowed until another caret appears.

For example, `^0-9^abc^def` defines the following:

- numbers are not allowed
- a, b, and c, are allowed
- d, e, and f are not allowed

Because the dash and caret have special meanings, there is a specific way to specify the actual dash and caret as part of the character set.

To specify a dash or carat as part of the character set, place a backslash (\) before the special character. for example, a dash is specified by typing "\-" and a caret is specified by typing "\^".

Because the backslash also has a special meaning, a backslash must also be represented by placing a backslash before it.

A few common characters sets are shown below:

- Whole Numbers (123): "\-0-9"
- Real Numbers (1.5): "\-0-9."
- Fractions (1/2): "\-/0-9"
- Positive Whole Numbers: "0-9"
- Positive Decimal Numbers: "0-9."
- Letters: "a-zA-Z"
- Numbers and Letters: "0-9a-zA-Z"

Note: This option is only available for the Input Text component.

Scroll Bar Options

Horizontal Scroll Bar

This section lets you define the behavior of the horizontal scroll bar. A horizontal scroll bar can be used to quickly navigate horizontally through text and is useful for displaying long lines of text within a narrow text area.

- On

  Select this option to attach a horizontal scroll bar to the text area. This scroll bar will always be shown.

- Off

  Select this option when a horizontal scroll bar is unnecessary or not preferred.

- Auto

  Select this option to attach a horizontal scroll bar to the text area. This scroll bar will automatically hide itself when the length of each line fits within the width of the text area.

Note: This option is not available for the Input Text component.

Vertical Scroll Bar

This section lets you define the behavior of the vertical scroll bar. A vertical scroll bar can be used to quickly navigate vertically through text and is useful for displaying several lines of text within a short text area.

- On

  Select this option when a vertical scroll bar is unnecessary or not preferred.

- Off

  Select this option to attach a vertical scroll bar to the text area. This scroll bar will automatically hide itself when the height of all the lines of text fit within the height of the text area.

- Auto

Select this option to attach a vertical scroll bar to the text area. The scroll bar will automatically hide itself when the height of all the lines of text fit within the height of the text area.

Note: This option is not available for the Input Text component.

Dynamic Visibility

For information about dynamic visibility, see *Dynamic Visibility* on page 239.

Animations and Effects tab

For information about the features in the Animations and Effects tab, see *Animations and Effects tab* on page 240.

Appearance tab

Layout tab

Wrap Text

Select the Wrap Text check box to cause lines of text that are longer than the component width to wrap to the next line of the label.

Note: This option does not apply to the Input Text component.

Transparency

For information about Transparency, see *Transparency* on page 234.

Note: This option is not available for the Label component.

Text tab

Format Selected Text

For information about the text settings, see *Text tab* on page 234.

Number Format

For information about the features in the Number Format area, see *Number Format* on page 237.

Note: This option is available only in the Label component.

Color tab

Click the cell selector button adjacent to an element to customize its color. The following options are available for customizing colors in the text component:

- Background Color

  You can customize the color of the text component background.

- Scroll Bar options
  - Track Color

    You can customize the color of the scroll bar track
  - Thumb Color

    You can customize the color of the thumb piece in the scroll bar.
  - Button Color

    You can customize the color of the scroll buttons.
  - Button Symbol Color

    You can customize the color of the arrows in the scroll buttons.

Note: These options are not available for the Input Text component.

Specific to Label

Numeric Format

For more information about the Numeric Format list, see *Number Format* on page 237.

Background

Use the following options to configure the appearance of the label background and borders:

- Draw Border On

  Use this option to specify which sides of the border are currently being adjusted by the Show Border and Border Thickness options. The four sides of the label border - Top, Bottom, Left, and Right - can be adjusted independently by selecting the appropriate side. All four sides can be adjusted simultaneously by selecting All Sides.

- Show Border

  Select Show Border to display a border on the label, at the side specified by the Border list. To customize the border color, click the adjacent color selector button.

- Border Thickness

  For information about the Border Thickess box, see *Thickness* on page 234.

- Show Fill

  Select the Show Fill check box to display a colored background behind the label. To customize the fill color, click the adjacent color selector button.

Web Connectivity Components Reference

chapter 21

Overview

This section discusses the Properties panel features for Web Connectivity components. The following Web Connectivity components are available in all versions of Xcelsius 2008:

- URL Button

Xcelsius Engage versions have the following additional components:

- Slide Show
- Connection Refresh Button

Xcelsius Engage Server and BusinessObjects Xcelsius Enterprise have all of the components listed above, as well as the following additional component:

- Reporting Services Button

For more information about Web Connectivity components, see*Using the Web Connectivity components* on page 130.

General Tab

Common to most components

Label

Use this option to set the text that will appear on the button. Type in the Label box, or click the adjacent cell selector button to select the label for the component.

Note: This option does not apply to the Slide Show component.

URL

Use this option to enter the Uniform Resource Locator (URL) link for the button. A URL is also referred to as a Web address. Type in the URL box or click the adjacent cell selector button to select the URL from the spreadsheet.

In the generated visualization, the URL associated with the button will update if the URL in the linked cell changes. This allows the URL to change dynamically, thereby allowing several different pages or files to be used by one component in the visualization.

Note:

- "http://" or "https://" is required for all URLs.
- This option does not apply to the Connection Refresh Button component.

Specific to the Slide Show component

URL (JPEG or SWF file)

Type in the URL box or click on the URL cell selector button to select the URL for the slide show. When the URL is bound to a spreadsheet cell, changes to the value of the cell will cause the Slide Show to load the image at the URL specified in the cell.

Once the image file has been loaded, the Slide Show will transition to the image using the transition parameters defined in the Behavior tab.

Note: Progressive JPEGs and JPEGs with CMYK coloring (as opposed to the standard RGB coloring) are not supported.

Specific to URL Button component

Window Options

Use the options in this section to choose where the link should be opened when the URL button is clicked.

New Window

Select this option to open the link in a new browser window.

This Window

Select this option to open the link in the same browser window. The current contents of the window will be replaced.

Specific to the Connection Refresh Button component

Available Connections

Select the connections that will be refreshed when the user clicks the Connection Refresh Button.

- Connections list box

  In the connections list box, select the checkbox adjacent to each connection that you want to be refreshed.

  To select all connections, select the checkbox at the top of the column.

Launch Data Manager

Click this button to launch the Data Manager to add or configure external connections. See *Using the Data Manager* on page 154.

Specific to Reporting Services Button

Label

Type the text to be displayed on the Button or click the cell selector button to select a cell from the spreadsheet.

Reporting Services

Click the Select Report button to launch the Select Report dialog box:

- **Select Report dialog box**
  - Xcelsius for Reporting Services URL

    Type the URL or select from the dropdown menu. Click the Submit button to display the reports available at the selected URL.

- **Reports**
  - Select Source Report:

    This area displays the file directory at selected URL.
  - Report Parameters:

    This area lists the Name and the Type of data for the parameters in the selected report.
  -
  -

- **Launch Report in Web Browser button**

  Click this button to preview the selected report in your default web browser.
- **Reports list box**

  This area will display the raw data contained in the report in columns by parameters.

Click OK or Cancel to return to the Properties panel.

Reporting Parameters

- Display Parameters at Run Time

Check this box to display the report parameters when the visualization is run.

- Reporting Parameters list box

  This area displays the report parameters to be configured.

- Use Service Values

  Click Use Service Values for the highlighted parameter to use values in the report. Select the values to be used from the dropdown menu.

- Link to Cell

  Click the Link to Cell use values from the spreadsheet. Click the adjacent cell selector button to select a range of cells.

Data Mapping

- Default

  Click Default to use the default data maps.

- Advanced

  Click Advanced to use specific ranges other than the defaults.

  - Mapped Ranges

    This area lists ranges that have been mapped. Click the plus and minus buttons to add or delete ranges from the list.

  - Selected Columns

    This area lists the columns for the selected Range. Click the up and down arrows to change the sort order of the highlighted Column. Click the "X" button to remove a column from the list.

  - Name

    Type a name for the selected Range.

- Range

  Click the Range cell selector button to select a range where the report data will be inserted.

History

- Use Report History

  Check this box to enable use of the report's history.

Behavior tab

Common tab

Trigger behavior

Trigger Cell

Use this option to select a cell from the spreadsheet that can trigger a web connection or connection refresh. This feature allows another action within the visualization, such as a List Box selection, to trigger the component - as if the component itself was clicked. The component is triggered according to the trigger behavior selected.

There are three behavior options for triggering the component:

- When Cell Updates

  The data is refreshed anytime the Trigger Cell updates.

- When Value Changes

  The data is refreshed when the value in the Trigger Cell changes.

- When Value Equals

  The data is refreshed when the value in the Trigger Cell is equal to a target value.

  Enter the target value or use the cell selector to bind to a cell in the spreadsheet.

Dynamic Visibility

For detailed information about Dynamic Visibility, see *Dynamic Visibility* on page 239.

Specific to Slide Show component

Transition Behavior

Use the parameters in this section to control the timing and style of the transition.

Transition Type

Use this option to set the style of the transition between each slide.

Easing Type

Use this option to set the behavior of the transition. The following options are available:

- Slow In

  The transition will begin slowly and accelerate as it progresses.

- Slow Out

  The transition will begin quickly and slow down as it progresses.

- Slow In and Out

  The transition will begin slowly and increase in speed until the middle of the transition. The transition will then decelerate until it is finished.

Transition Time

Use this option to set the amount of time for the transition between each slide. Enter the desired value in the text box, or use the up/down arrows to adjust the time.

Note: A smaller number is better for smoother transitions, while a larger number may be better for performance.

Smoothness

Use the slider to set the smoothness of the transition.

Specific to Reporting Services Button

Common Tab

- **Refresh Options**
  - Refresh On Load

    Check this box to refresh the data when the visualization is run.
  - Refresh Every

    Check this box to refresh the data at a set interval.

    Type or use the up/down arrows to set the interval integer.

    Click the dropdown menu to select the interval timeframe: Seconds, Minutes, or Hours.

- **Load Status**
  - Loading Message

    Type or use the cell selector to select a message that will be displayed while the data connection is loading.
  - Idle Message

    Type or use the cell selector to select a message that will be displayed while the data connection is idle.
  - Insert In

    Use the cell selector button to select a cell where the Loading and Idle Messages will be inserted.
  - Enable Load Cursor

    Check this box to display a special cursor while the data connection is loading.
  - Disable Mouse Input on Load

    Check this box to disable user interaction while the data connection is loading.

- **Trigger Behavior**

Trigger Cell

se this option to select a cell from the spreadsheet that can trigger a web connection or connection refresh. This feature allows another action within the visualization to trigger the component - as if the component itself was clicked. The component is triggered according to the trigger behavior selected.

There are three behavior options for triggering the component:

- When Cell Updates

  The data is refreshed anytime the Trigger Cell updates.

- When Value Changes

  The data is refreshed when the value in the Trigger Cell changes.

- When Value Equals

  The data is refreshed when the value in the Trigger Cell is equal to a target value. Enter the target value or use the cell selector to bind to a cell in the spreadsheet.

- Dynamic Visibility

  For detailed information about Dynamic Visibility, see *Dynamic Visibility* on page 239.

Animations and Effects tab

For information about the features in the Animations and Effects tab, see *Animations and Effects tab* on page 240.

Appearance tab

Layout tab

Show Button Background

Select the Show Background check box to show a background in the button. By clearing the Show Background check box, you can create a text-only link. You can also clear the check box and place the transparent button over an imported image to create a custom button.

Note: This option is not available in the Slide Show and Reporting Services Button components.

Transparency

For detailed information about this option, see *Transparency* on page 234.

Note: This option does not apply to the URL Button component.

Text tab

For detailed information about the settings on the Text tab, see *Text tab* on page 234.

Note: This tab does not apply to the Slide Show component.

Color tab

Use this area to customize the color of various parts of a component.

Note: This tab is not available for the Slide Show component.

Button

Default Color

Click the Default color selector button to change the background color of the button in its default state.

Pressed Color

Click the Pressed color selector button to change the background color of the button when it is clicked.

Label

Default Color

Click the Default color selector button to change the text color of the label when the button is in its default state.

Pressed Color

Click the Pressed color selector button to change the text color of the label when the button is clicked.

Specific to Slide Show component

Image Options

Sizing Method

Use this option to define how images are sized within the bounds of the Slide Show.

- Original Size

  The image is shown at its actual size. Areas of the image that extend outside of the Slide Show are not shown.

- Stretch

  The image is stretched to fit the bounds of the Slide Show.

- Scale

  The image is sized to the extents of the Slide Show bounds while still maintaining its aspect ratio.

Horizontal Alignment

Use this option to define how images are horizontally aligned to the bounds of the Slide Show. Choose from the following: options:

- Center

  The image is centered horizontally within the Slide Show.

- Left

  The image is aligned to the left edge of the Slide Show.

- Right

  The image is aligned to the right edge of the Slide Show.

Vertical Alignment

Use this option to define how images are vertically aligned to the bounds of the Slide Show. Choose from the following:

- Middle

  The image is centered vertically within the Slide Show.

- Top

  The image is aligned to the top edge of the Slide Show.

- Bottom

  The image is aligned to the bottom edge of the Slide Show.

Other Components Reference

chapter 22

Overview

This section discusses the Properties panel features for Other components. The following Other components are available in all versions of Xcelsius 2008:

- Local Scenario Button
- Trend Icon
- Print Button
- Reset Button

Xcelsius Engage versions have the following additional components:

- Calendar
- History
- Panel Set
- Source Data
- Trend Analyzer
- Grid

General tab

Common to some components

Title

Use the Title box to manually enter the title for the component or click the cell selector button to select the title from the spreadsheet. When the title is bound to the spreadsheet, changes to the value of the underlying spreadsheet cell will be reflected in the button label.

Note: This option applies only to the Calendar and Panel Set components

Label

Use the Label text box to manually enter the button label or click the Label cell selector button to select the button label from the spreadsheet. When the label is bound to the spreadsheet, changes to the value of the spreadsheet cell will be reflected in the label.

Note: This option only applies only to the Local Scenario Button, Print Button, and Reset Button components.

Specific to the Trend Analyzer component

Data

Use the cell selector button to select the range of cells that contains the data you want to analyze.

Trend/Regression Type

- Use Best Fit

  Use this option to have Xcelsius 2008 determine the appropriate analysis type.

- Select a Type

  Use this option to select the analysis type:

  - Linear
  - Logarithmic
  - Polynomial
  - Power
  - Exponential
  - Order

    This option is only available when the Trend Type: Polynomial is selected. Type a value between two (2) and six (6) in the box, click the up/down arrows to adjust the value, or click the cell selector button to select a value in the spreadsheet.

Insertion Options

- Analyzed Data Destination

  Use the cell selector button to select the spreadsheet destination range for the analyzed data. The spreadsheet cells must be empty.

- More Options

  Use these options to insert additional analysis information in the spreadsheet:

  - Equation Type Destination
  - This inserts into the destination cell the type of equation that was used to analyze the data
  - Equation Destination
  - This inserts into the destination cell the equation that was used to analyze the data.
  - R^2 Value Destination
  - This inserts into the destination cell the R^2 value of the analysis.
  - F Value Destination
  - This inserts into the destination cell the F value of the analysis.

Specific to the Calendar component

Data Insertion

Use the options in this section to define how the Calendar component will behave when a selection is made.

Insert Type

Use this option to specify the type of data (Day or Date) that is inserted when a selection is made.

Destination

Use this option to select the cell into which the Day or Date from the calendar will be inserted.

Month Destination / Year Destination

Click the cell selector button to select a cell for the Month and/or Year of the date selected on the Calendar to be inserted into.

Specific to the Grid component

Data

Use this option to select the range of data for the grid from the spreadsheet. The grid displays a value for each cell selected, and arranges them in the same order as the selection. Any change to the values in these cells is reflected in the corresponding grid values. Similarly, any change to the grid values is inserted into the corresponding cells and will be reflected across all other components linked to the corresponding cells.

Scale

Use the options in this section to define the data value lower and upper limits. These limits are applied to every value in the grid.

Minimum Limit

Minimum Limit is the lowest allowable value. Enter the value in the box, or use the cell selector button to select a value from the spreadsheet.

Maximum Limit

Maximum Limit is the lowest allowable value. Enter the value in the text box, or use the cell selector button to select a value from the spreadsheet .

Specific to Trend Icon component

Data

The value of the Data parameter determines which icon is displayed for the component:

- If the value of Data is greater than 0, the component displays an up arrow.
- If the value of Data is less than 0, the component displays a down arrow.
- If the value of Data is equal to 0, the component displays a neutral symbol.

Use the Data box to manually enter the data value for the component or click the cell selector button to select the data value from the spreadsheet.

Colors

Click the color selector button adjacent to an attribute to customize the color. The following options for customizing colors are available:

- Positive Value Color

  You can customize the color the trend icon changes to when its data value is greater than zero.

- Zero Value Color

  You can customize the color the trend icon changes to when its data value is equal to zero.

- Negative Value Color

  You can customize the color the trend icon changes to when its data value is less than zero.

Specific to the Panel Set component

Panel Titles

You can use the Manual Edit button or the cell selector button to indicate what title you want to appear for each frame on the Panel. If you use the Manual Edit button you can type in the title manually. If you select the cell selector button, you can link the title to a cell in your spreadsheet.

Layout

Use the Layout option to select what you would like your panel to look like. There are a variety of layouts to choose from.

Content

Panels

Use the Panels list to select a panel to link content to. The options selected in the Content section will apply only to the highlighted Panel in the Panels list.

Content Type

- Embedded JPEG or SWF

  Use the Embedded option to link SWF files or JPEGs to the Panel directly from your computer or a network location. Click the Import Button to open a dialog box for the Panel, click the Click to Add Images button to open a second dialog box which allows you to navigate to the desired file that will be embedded in the component.

- By URL

  Use the By URL option to enter the URL location for the JPEG or SWF files that you want to link to the panel.

  The URLs box is only available if the Content Type selected is By URL. You can use the manual edit button or the cell selector button to point

the component to one or more URLs. Click the manual edit button to type in the URLs manually. Click the cell selector button to link the URLs to cells in the spreadsheet.

- None

  Use this option to leave the selected panel empty.

- Drop-Down Menu Labels

  Use Drop-Down Menu Labels to add labels to the content in the selected Panel. If you use the manual edit button you can type in the labels manually. If you select the cell selector button, you can link the labels to cells in your spreadsheet.

Specific to the History component

Data

Use the cell selector button to select the cell that contains the data you want to track.

Insertion Options

- Data Destination. Use the cell selector button to specify the cell(s) that the history data will be inserted into.

  Note: The number of cells in the Data Destination range will determine the number of data changes retained by the component. Once the limit is reached, the oldest data change will drop off. If the range is a single column with multiple rows, the newest data is inserted in the bottom cell bumping older data up one row. If the range is a single row with multiple columns, the newest data is inserted in the right-most cell bumping older data left one column. If the range has multiple rows and multiple columns, the newest data will be inserted in the right-most column's bottom cell; older data is then bumped left to the limit of the range and then up one row to the right most column in a zigzag pattern.

- Select the freqency of the cell tracking:
  - When Value Changes. The cell history will be recorded each time the value in the cell changes.

- On Interval. The cell history will be recorded at scheduled intervals.

  Enter the interval duration in the Duration (seconds) box.

Specific to the Source Data component

Insertion Type

Select the Insertion Type from the dropdown list.

- Value

  Select this option to have the selected item's value inserted in the target cell

- Row

  Select this option to have the selected item's corresponding row data inserted in the target range

- Column

  Select this option to have the selected item's corresponding column data inserted in the target range

Behavior tab

Common tab

Dynamic Visibility

For detailed information about Dynamic Visibility, see *Dynamic Visibility* on page 239.

Note: This option is not available for the History, Source Data and Trend Analyzer components. These components are not displayed in the visualization.

Specific to the Calendar component

These settings control the default date and date range for the Calendar component.

Default Date

- Use Current Date

  Click this option to control the default date for the Calendar component. Selecting this option means that the Calendar component will always load with the current date.

- Use Custom Date

  Click this option to set the default date to a specific date. Selecting this option makes the Day, Month and Year entry fields available. For each field type the number value or click the cell selector button to select a value from the spreadsheet.

  - Default Day

    Use this option to specify the default Day for the Calendar component.

  - Default Month

    Use this option to specify the default Month for the Calendar component.

  - Default Year

    Use this option to specify the default Year for the Calendar component.

Enable Calendar Limits

Check this box to control the date range for the Calendar component. Selecting this option requires you to specify the Start Month, Start Year, End Month and End Year. Unselecting this option means that the Calendar component will allow the user to scroll through all dates.

- Start Month

  Use this option to specify the Start Month for the Calendar component.

- Start Year

  Use this option to specify the Start Year for the Calendar component.

- End Month

  Use this option to specify the End Month for the Calendar component.

- End Year

  Use this option to specify the End Year for the Calendar component.

Specific to the Grid component

Increment

Grid item values that are manually set are rounded to the Increment number, allowing restricted input for quantities that require specific increments, such as dozens.

Numbers can also be made more readable by using the Increment to round to a specific digit. Enter the desired value in the text box, or use the cell selector button to select a value from the spreadsheet.

Limits

Minimum Limit

Use this option to set the Minimum Limit behavior for the component. Choose from the following:

- **Open** - The user can set the grid items to any value that does not conflict with the Scale Maximum Limit.
- **Fixed** - The user cannot set the grid items to values less than the Scale Minimum Value.

Maximum Limit

Use this option to set the Maximum Limit behavior for the component. Choose from the following:

- **Open** - The user can set the grid items to any value that does not conflict with the Scale Minimum Limit.

- **Fixed** - The user cannot set the grid items to values greater than the Scale Maximum Limit

Interaction

Enable Interaction

Check Enable Interaction to enable runtime manipulation of the values in the grid.

Note: Regardless of this option, input is disabled for all grid items linked to cells with formulas.

Mouse Sensitivity

Use this setting to determine how sensitive the value of the component is to pointer movements. Higher sensitivity settings are beneficial when the value of the component needs to span a large range, while lower settings permit more granular manipulation of the value.

Scroll Behavior

Use the Scroll Behavior options to specify how users will adjust the values of the component.

- Auto: The value of the cells will be controlled by dragging and holding the pointer above or below the cell. The value will automatically and continually be adjusted as long as the mouse button remains down. If the pointer is above the cell, the value increases. If the pointer is below the cell, the value decreases. The farther away the pointer is from the value display, the faster the value will change.
- Manual: The value of the cells will be controlled by manually dragging the pointer. When the pointer is dragged up or down, the value is adjusted by an amount approximate to the distance dragged. Dragging up increases the value of the component. Dragging down decreases the value of the component.

Specific to the Panel Set component

Panel Behavior

Enable Maximize Button

Select this option to allow the user to expand a single Panel so that it covers the other panels and then minimize it again so it returns to its original size. This feature is useful when you want to emphasize different sets of data at different times during a presentation.

Zoom Speed

Use the slider to set the speed of the window animation faster or slower.

Selected Item

Panel

Select which panel you want to set as the default when the visualization is run.

Item

Select which content you want to appear in the default panel when the visualization is launched.

Ignore Blank Cells

In Values

Check In Values to prevent all of the empty values past the last non-empty value from being displayed in the Panel set component. This allows a variable amount of data to be displayed in the Panel Set component.

Specific to the Print Button component

Print Scale

- Scale To:

  Enter a value in the text box to manually set the scale.

- Scale to Fit Page

  Select this option to scale the print version of the visualization to the paper size.

Specific to the Source Data Component

Selected Item Index

Enter the value or use the cell selector button to select a value from the spreadsheet.

Animations and Effects tab

For information about the features in the Animations and Effects tab, see *Animations and Effects tab* on page 240.

Specific to the Calendar component

Enable Sound

Check the Enable Sound box to enable sound for the selected component when the visualization is run. A sound effect will be played when the component is interacted with.

Appearance tab

Layout tab

Show button background

This option controls the visibility of the title for the selected component. When you select the Show Title check box, the following options for customizing the appearance of the title become available:

Note: This is applicable only to the Local Scenario Button, Print Button, and Reset Button components.

Transparency

For detailed information on Transparency, see *Transparency* on page 234

Specific to the Panel Set component

Show Panel Headers

Check the Show Panel Headers box to display the header with the title, maximize and dropdown menu for each Panel.

Number of Panels Displayed

Enter a value or use the up/down arrows to adjust the value. This option will determine the number of labels displayed by default in the drop-down menu of the panels.

Background Transparency

Use the slider or enter a value to adjust the transparency of the Panel Set's background. A value closer to 100% will display a lighter colored background. This setting does not affect the content of the component.

Specific to the Grid component

Vertical Margin

Enter a value or use the up/down arrows to adjust the value. This setting modifies the amount of space between each column of items in the Grid component.

Horizontal Margin

Enter a value or use the up/down arrows to adjust the value. This setting modifies the amount of space between each row of items in the Grid component.

Text tab

Select the box in the Show column adjacent to each text element you want to display on the component.

Format Selected Text

The following parameters apply to the text element that is highlighted in the Show-Text selection box.

- Font Settings

  For information about font settings, see *Text tab* on page 234.
- Position

  For information about the Position list, see *Position* on page 236.
- X (Horizontal) Offset

  For information about the Offset X box, see *Offset X* on page 236.
- Y (Vertical) Offset

  For information about the Offset Y box, see *Offset Y* on page 237.
- Number Format

For information about the features in the Number Format area, see *Number Format* on page 237

Color tab

You can customize the color of component parts. The items available depend on the component you are working with. Click the color selector button adjacent to the item to change its color.

Alerts tab

For information on the features available on the Alerts Tab, see *Alerts Tab* on page 241.

Supported Excel Functions

chapter 23

Supported Excel Functions

This chapter contains a list of the Microsoft Excel functions that Xcelsius 2008 supports.

ABS	ACOS	ACOSH
AND	ASIN	ASINH
ASSIGN	ATAN	ATAN2
ATANH	AVEDEV	AVERAGE
AVERAGEA	BETADIST	CEILING
CHOOSE	COMBIN	CONCATENATE
COS	COSH	COUNT
COUNTA	COUNTIF	DATE
DATEVALUE	DAVERAGE	DAY
DAYS360	DB	DCOUNT
DCOUNTA	DDB	DEGREES
DEVSQ	DGET	DIVIDE
DMAX	DMIN	DOLLAR
DPRODUCT	DSTDEV	DSTDEVP
DSUM	DVAR	DVARP
EDATE	EOMONTH	EVEN
EXACT	EXP	EXPONDIST
FACT	FALSE	FIND

FISHER	FISHERINV	FIXED
FLOOR	FORECAST	FV
GE	GEOMEAN	GT
HARMEAN	HLOOKUP	HOUR
IF	INDEX	INT
INTERCEPT	IPMT	IRR
ISBLANK	KURT	LARGE
LE	LEFT	LEN
LN	LOG	LOG10
LOOKUP	LOWER	MATCH
MAX	MEDIAN	MID
MIN	MINUS	MINUTE
MIRR	MOD	MODE
MONTH	N	NE
NETWORKDAYS	NORMDIST	NORMINV
NORMSINV	NOT	NOW
NPER	NPV	OFFSET
OR	PI	PMT
POWER	PPMT	PRODUCT
PV	QUOTIENT	RADIANS
RAND	RANGE_COLON	RANK
RATE	REPLACE	REPT

RIGHT	ROUND	ROUNDDOWN
ROUNDUP	SECOND	SIGN
SIN	SINH	SLN
SMALL	SQRT	STANDARDIZE
STDEV	SUM	SUMIF
SUMPRODUCT	SUMSQ	SUMX2MY2
SUMX2PY2	SUMXMY2	SYD
TAN	TANH	TEXT
TIME	TIMEVALUE	TODAY
TRUE	TRUNC	UPPER
VALUE	VAR	VDB
VLOOKUP	WEEKDAY	WEEKNUM
WORKDAY	YEAR	YEARFRAC

Index

A

Accordion Menu component 89
Accordion Menu, sample visualization 99
addresults.aspx 168, 172
Adobe PDF, exporting visualizations to 135
alerts 148
    Alerts tab
        chart components 267
        features on 241
        map components 319
        selector components 300
Appearance tab 259
    chart components 259
    map components 317
    other components 367
    selector components 290
    text components 335
    web connectivity components 349
area chart 74
art and background components 127

B

background components 127
    Behavior tab 326
    General tab 322
bar chart 74
Behavior tab 326
    background components 326
    chart components 255
    Dynamic Visibility 239
    map components 316
    other components 361
    selector components 285
Behavior tab *(continued)*
    text components 332
    web connectivity components 345
Browse button 233
bubble chart 74
BusinessObjects Enterprise 206, 207
    exporting SWF files 207
    opening XLF files 206
    refreshing SWF files 210
    rights 214
    saving XLF files 206
    viewing SWF files 209
BusinessObjects Enterprise, exporting
    visualizations to 138

C

candlestick chart 74
canvas 44
    fitting to components 44
    placing components on 43
    resizing 44
Cell Selector button 232
changing 44
    canvas size 44
    global styles 60
chart components 74
    Alerts tab 267
    Appearance tab 259
    Behavior tab 255
    creating 79
    Drill Down tab 252
    General tab 248
    types 74
Check Box component 89

Color Selector button 232
column chart 74
combination chart 74
Combo Box component 89
components 50
  hiding with Object Browser 50
  selecting with Object Browser 49
Components Explorer 40
configuring
  XML Data Button component 167
creating
  charts 79
  global styles 62
  templates 151, 154
  visualizations
    importing Excel files 68
    selecting data sources 68
Crystal Reports Server 207
  exporting SWF files 207
  opening XLF files 206
  refreshing SWF files 210
  rights 214
  saving XLF files 206
  viewing SWF files 209
Crystal Reports Server, exporting visualizations to 138
Crystal reports, unmanaged 201
Crystal Xcelsius
  how it works 36
  importing XLF files from previous versions 32
  new features 24
  supported Excel functions 372
  using XML maps in 189
Crystal Xcelsius 2008
  tools 40

D

data comparison presentation, example 39
data sources
  selecting 68
data sources *(continued)*
  updating 70
deleting components 51
dial component 107
display status, sample visualization 144
drill down chart, sample visualization 81
Drill Down tab, chart components 252
Dynamic Visibility 239
  functionality 142
  sample visualization 142

E

ellipse component 127
emailing visualizations 136
embedded fonts 57
Enterprise 207
  exporting SWF files 207
  opening XLF files 206
  refreshing SWF files 210
  rights 214
  saving XLF files 206
  viewing SWF files 209
Excel 224
  frequently asked questions 224
  functions, supported 228
  linked Excel files 228
  macros 230
  regional formats, supported 229
  Server Busy message 226
Excel files
  linked 228
  maximum size of 229
  XML maps 189
Excel functions, supported 372
Export Settings 70
exporting visualizations 135
  to Adobe PDF 135
  to BusinessObjects Enterprise 138
  to Crystal Reports Server 138
  to Flash 137
  to HTML 137

exporting visualizations *(continued)*
to PowerPoint 134, 225
to Word 136
with Outlook 136
external files 128
embedding 128
nested 129

F

Filter component 89
Filter component, sample visualization 95
Fish-Eye Picture Menu component 89
fit canvas to components 44
fit canvas to window 44
Flash 137
exporting visualizations to 137
slow run time 226
Flash Player settings 118
Font Options 57
Font Settings 234
fonts
understanding 57
format 229
regional 229
scientific 225
table component vs. spreadsheet 224
Format menu 55
Align 55
Center in Document 56
Make Same Size 56
other commands 56
Space Evenly 56
FS command button 114

G

gauge component 107
General tab 322
background components 322
chart components 248
map components 314
General tab *(continued)*
other components 354
text components 330
web connectivity components 340
global styles 59
changing 60
creating 62
transferring 63
grid component 114
sample visualization 121
grid tool 45
grouping components, with Object Browser 50

H

hiding components, with Object Browser 50
horizontal line component 127
HTML, exporting visualizations to 137

I

Icon component 89
ignore end blanks 146
image component 127
embedding external files 128
how to use 128
nested external files 129
Import Model 54, 55, 68
importing Excel files 68
Information button 233
InfoView 209
refreshing outside 213
refreshing SWF files 210
viewing SWF files 209
input text area component 113
installation, frequently asked questions 222
interactive calendar 114
interface, Crystal Xcelsius 2008 40

L

Label Based Menu component 89
label component 113
line chart 74
linking data sources 68
List Box component 89
List Builder component 89
List Builder, sample visualization 96
List View component 89
Live Office 204
  parameters 204
  Xcelsius visualization data source 202
LiveOffice connector 130
LiveOffice Connector 202
  making a refreshable visualization 202
  passing parameters to Excel 205
  updating web service setting 215
load selection, XML Data Button component 171
LoadPreview.xml 172
local scenario buttons component 114
  using 118

M

Macromedia Flash, installation 222
map components 111
  Alerts tab 319
  Appearance tab 317
  as display component 111
  as selector components 111
  Behavior tab 316
  General tab 314
  how they work 111
  sample visualization 112
maximum rows 228

N

nested external files 129
non-embedded fonts 57
Numeric Format list 237

O

Object Browser 48
  context menu 49
  deleting components with 51
  grouping components in 50
  hiding components 50
  renaming components in 52
  selecting components in 49
OHLC chart 74
opening Properties panel 51
other components 114
  Appearance tab 367
  Behavior tab 361
  General tab 354
Outlook, emailing visualizations with 136

P

panel set 114
parameters, from Crystal Xcelsius 2008 to Live Office 204
pie chart 74
play button 107
Play Selector component 89
Position list 236
PowerPoint 134
  exporting visualizations to 134
  frequently asked questions 225
previewing visualizations 63, 69
progress bar 107
Properties panel 46
  for multiple components 48
  opening 51
  tabs 46
publishing visualizations. See exporting visualizations 137

R

radar chart 74
Radio Button component 89
receive selection, XML Data Button component 168
rectangle component 127
refresh 212
  manual 212
  on interval 211
  on load 211
  on trigger behavior 212
  SWF files inside Infoview 210
  SWF files outside InfoView 213
renamed spreadsheets, re-importing 222, 224
renaming components, with Object Browser 52
Reporting Services 194

S

sample visualizations 99
  accordion menu component 99
  display status 144
  drill down chart 81
  Dynamic Visibility 142
  filter component 95
  grid component 121
  list builder component 96
  map component 112
  sliding picture menu 100
  status list 144
  value component 109
  viewing in Xcelsius 64
  XML Data Button component 166
saved scenarios, location of 225
selecting data sources 68
selector components 89
  Alerts tab 300
  Appearance tab 290
  Behavior tab 285
send data, XML Data Button component 172
send selection, XML Data Button component 167
SendPreview.xml 168
Server Busy message 226
Sharepoint 180, 182, 195
  deploy Crystal Xcelsius 2008 visualizations 195
  Sharepoint Param Component 180
  Sharepoint Provider Component 182
  Xcelsius Client 180
single value components 107
  fixed 226
skins 59
slider component 107
Sliding Picture Menu component 89
Sliding Picture Menu, sample visualization 100
snapshots 139
Source Data component 89
spinner component 107
spreadsheets. See Excel files 68
SQL Server Reporting Services 194
stacked charts, types 74
starting visualizations, troubleshooting 226
status list, sample visualization 144
supported features 372
  Excel functions 372
  regional formats 229

T

Table component 89
templates 65
  creating 151, 154
text components 113
  Appearance tab 335
  Behavior tab 332
  General tab 330
Ticker component 89
Toggle Button component 89
tools 40
  Components Explorer 40
  Object Browser 48

tools *(continued)*
Properties panel 46
transferring global styles 63
Transparency box 234
trend icon 114
troubleshooting
Excel 226
fixed single value components 226
frequently asked questions 225
location of scenarios 225
slow run time 226
starting visualizations 226
upgrading Microsoft Office 222
URL button component 225
URL-based images 227

U

Unicode font options 57
unmanaged Crystal reports 201
unmanaged environment 201
updating data 70
URL link button 130
troubleshooting 225
URL-based images 227

V

value component 107
sample visualization 109
variable length ranges, ignore end blanks 146
vertical line component 127
visualizations
creating 68
examples 37
visualizations *(continued)*
previewing 63
taking snapshots 139
updating data for 70
VLOOKUP 227

W

web connectivity components 130
Appearance tab 349
Behavior tab 345
General tab 340
web service connector component 130
Weight box 234
what-if-presentation 37
Word, exporting visualizations to 136

X

X Shift box 236
XLF files
importing from Xcelsius 3.0/3.5 32
XML Data Button component 130, 161
configuring 167
load selection 171
receive selection 168
send data 172
send selection 167
XML maps 189
XY chart 74

Y

Y Shift box 237